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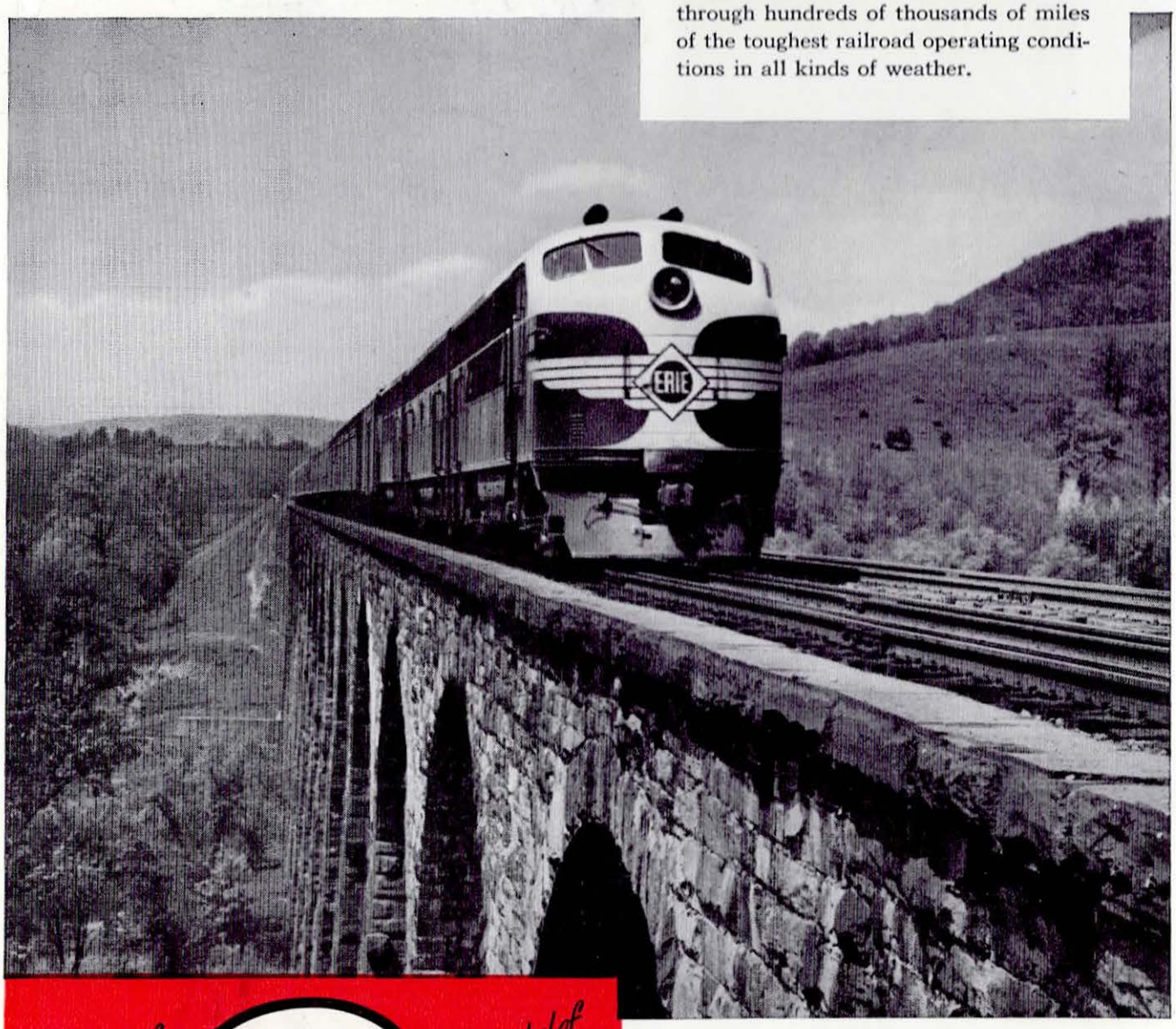

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Completely-assembled Model 751, 9-ft length, with running rail in place.

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You probably recognize this guard rail . . . the Bethlehem Hook-Flange type. But, if you've never studied it before, note how the flange dips under the base of the running rail. There it's always pinned down by the weight of the passing train, so that no amount of thrust can knock it out of place.

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Ask for a copy of Folder 555. It contains much helpful information, with a full diagrammatic page devoted to lengths and settings of Hook-Flange Guard Rails.

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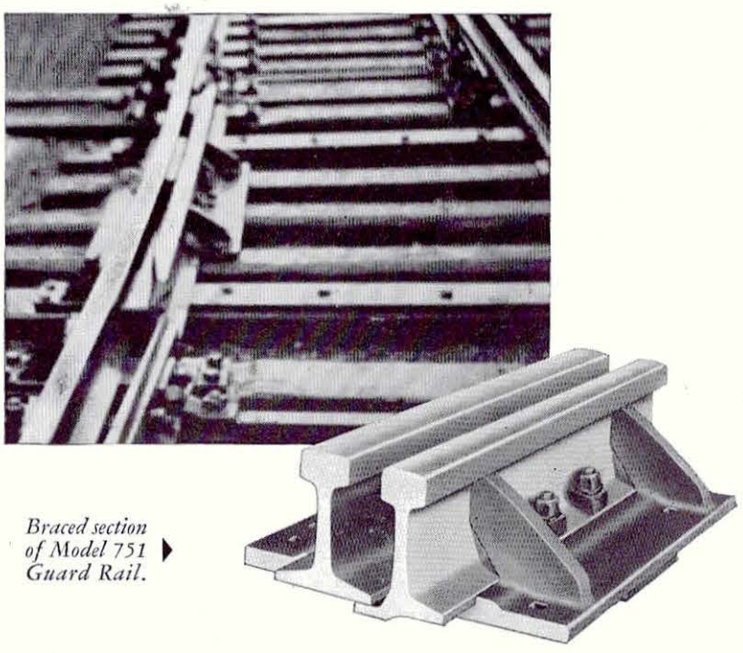

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Vol. 132, No. 15 April 14, 1952

RAILWAY AGE

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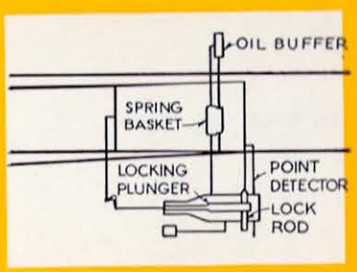
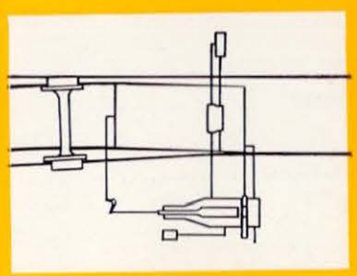
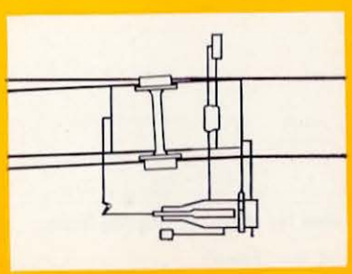
THIS IS WHAT HAPPENS . . . when a train trails a spring switch equipped with a "Union" Mechanical Facing Point Lock.



1. In the normal position of the spring switch, a standard lock rod is firmly engaged by the locking plunger of the Mechanical Facing Point Lock.



2. The flexing of the switch points by the leading wheels of the train automatically withdraws the locking plunger from the lock rod before the spring head rod starts to move.



3. As the train advances, the unlocked points are forced open against the spring action of the switch . . . and after the train has cleared the switch, the points are returned to normal and locked.

Equip your spring switches with "Union" Mechanical Facing Point Locks. Then, you may expedite traffic with safety.

"Union" Mechanical Facing Point Locks, while retaining all the advantages of the spring switch for trailing moves, provide protection for facing-point moves. For complete information write or telephone our nearest district office.

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WEEK AT A GLANCE

CURRENT RAILWAY STATISTICS

Operating revenues, two months
1952 ..... $1,712,000,596
1951 1,564,685,412

Operating expenses, two months
1952 ..... $1,335,056,113
1951 1,253,704,201

Taxes, two months
1952 ..... $206,697,408
1951 181,224,306

Net railway operating income, two months
1952 ..... $141,962,386
1951 98,153,367

Net income, estimated, two months
1952 ..... $91,000,000
1951 53,000,000

Average price railroad stocks
April 8, 1952 ..... 59.62
April 10, 1951 ..... 55.37

Car loadings, revenue freight
13 weeks, 1952 9,338,067
13 weeks, 1951 9,493,958

Average daily freight car surplus
Week ended April 5, 1952 13,722
Week ended April 7, 1951 13,436

Average daily freight car shortage
Week ended April 5, 1952 2,398
Week ended April 7, 1951 21,422

Freight cars delivered
March 1952 8,159
March 1951 7,011

Freight cars on order
April 1, 1952 115,854
April 1, 1951 158,619

Freight cars held for repairs
March 1, 1952 91,906
March 1, 1951 87,671

Net ton-miles per serviceable car per day
January 1952 (preliminary) 977
January 1951 1,017

Average number railroad employees
Mid-February 1952 1,218,281
Mid-February 1951 1,253,068

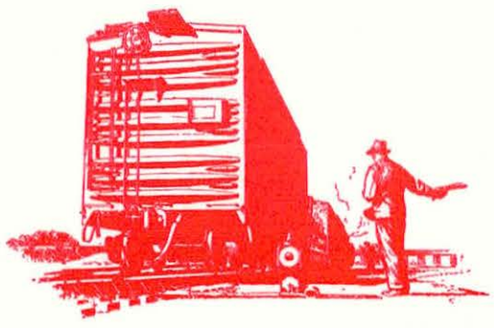
In This Issue . . .

THE STATUS OF precooked frozen foods for use in railroad dining cars, as a means of cutting both prices and expenses, is examined in the article which begins on page 48. Conclusions are that such foods can reduce dining car losses, if they are used with discrimination and care, but that their misuse can result in quick failure. Possibility of price cuts, incidentally, is demonstrated by the news announcement of reductions averaging 15 per cent on the "Des Moines Rocket" following introduction of frozen food service on that train.

ONE SWALLOW doesn't make a summer, and one month isn't a year—but if January figures are indicative, the railroads are going to reach new peaks of operating efficiency again in 1952. In January, for example, 39 out of 52 large Class I railroads showed increases over January 1951 in gross ton-miles per train-hour. The decreases were mostly small, and attributable largely to localized traffic or weather conditions, but the increases ranged up to a rough 20 per cent for some roads, e. g., the C. & O. and the Cotton Belt. For detailed figures, see the tables on pages 30 and 31.

A "NEW IDEAS" DEPARTMENT, to study "post-diesel applications" of knowledge gained in making diesel locomotives, has been established at Electro-Motive, under two veteran executives. Announcement of the new department is included in the Supply Trade news columns, along with other personnel changes at E.-M.D. Other news developments of the past week included a Coast Line appeal from the district court decision in the F.E.C. reorganization case; analysis of March freight-car deliveries (8,159 units); competitive bidding relief for a proposed Chicago & Western Indiana bond issue; and a spring freshet of railway construction projects.

In Washington . . .



NOT 10,000, BUT 11,000, freight cars, should be built every month from next October 1 to July 1, 1954, and 11,875 every month for the 12 months after that, according to the Defense Transport Administration's latest freight-car study (page 12). The orders are there—April 1 backlog was nearly 116,000 units—but where's the steel?

FEBRUARY 1951, as everyone probably remembers, was the month when so many of the operating brothers suffered a mysterious epi-

WEEK AT A GLANCE

demic of the pip, or the vapors, or some other equally dreadful malady. In consequence, earnings for that month are not strictly comparable with the much better earnings for February of this year, when the brothers, on the whole, were in rather better health. The complete figures for both Februarys, and the first two months of each year are, nevertheless, included on page 11, in a summary of the A.A.R.'s usual monthly earnings report.

THOSE BUSY LITTLE BEAVERS in the Department of Justice (sic), who can't abide "monopoly" (except in politics and labor unions), are at it again! This time the department's attorneys shuffled off to Buffalo to file a district court complaint against three signal companies—Westinghouse Air Brake, General Railway Signal, and Western Railroad Supply. The charge? That the companies have a "monopoly" on grade crossing protective devices! YTple1TTT

. . . And Elsewhere

A LONG-TERM PROGRAM of selling all possible surplus real estate, both to reduce taxes and obtain funds for debt reduction, was revealed by New Haven President Frederic C. Dumaine in a recent talk to the New York Society of Security Analysts. In line with this policy, he said, the road is disposing of its old general office building in New Haven to the Knights of Columbus; employees formerly quartered in the building have been moved into the more modern structure immediately adjacent. Mr. Dumaine also told the analysts he thinks his road has "cut into" the air lines' passenger business in southern New England.

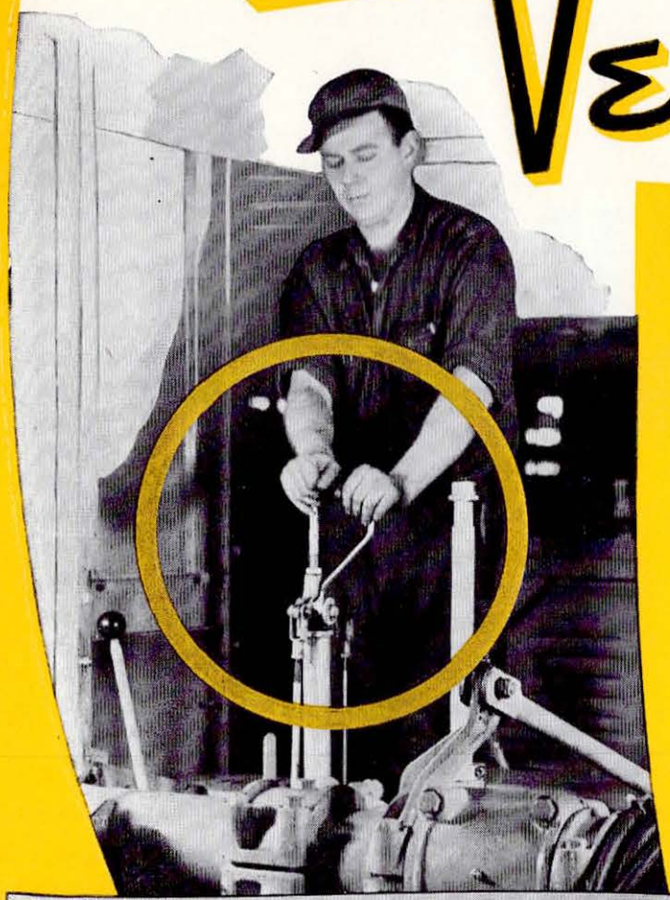
BENJAMIN F. FAIRLESS, president of the United States Steel Corporation, was talking about steel in his radio address on April 6. But everything he said applies with equal force to the railroads. Consider, for example, this quotation: "Equally obnoxious is the idea that a government agency—on the pretext of controlling wages and prices—can usurp the power to manage American industry without accepting any financial responsibility whatever for the consequences of its actions. At present, the government . . . fixes, with absolute finality, the ceiling prices at which steel may be sold. It now seeks, apparently, to determine the wage rates which the steel companies shall pay. So about the only right of management which would then remain in the hands of the owners, is the right to bear the financial losses resulting from government controls."

INTERNATIONAL AND INTERPROVINCIAL trucking are not likely to be brought under federal regulation in Canada within the near future, Trade Minister C. D. Howe and Transport Minister Lionel Chevrier told a joint legislative committee of railroad employees. "We think it should be controlled," Mr. Howe is reported to have said, "but whether we can do it in a practical way is a matter that has not been solved yet."

THE FEMININE TOUCH will be added to Chesapeake & Ohio passenger service when Ann E. Stevenson, assistant to vice-president, passenger traffic and public relations, begins a thorough check of cleanliness, courtesy, comfort, decorations and service. On her new assignment, Mrs. Stevenson will ride the road's entire network of trains from Norfolk to Grand Rapids, and will inspect sleeping cars, coaches, diners and stations, with the object of coordinating passenger and operating department efforts to insure the highest standards of service and facilities.

"MATERIALS HANDLING is one of the last frontiers for cost reduction in industry and deserves recognition for its contribution to our economy." So said John G. Bucuss, president of the Acme Steel Products division of the Acme Steel Company, when his firm gave $5,000 toward establishment of a Materials Management Center at Wayne University in Detroit. The center, which is said to be the first of its kind in the country, and which plans to offer a four-year college course leading to a degree in materials management, was described on page 76 of the February 11 Railway Age.

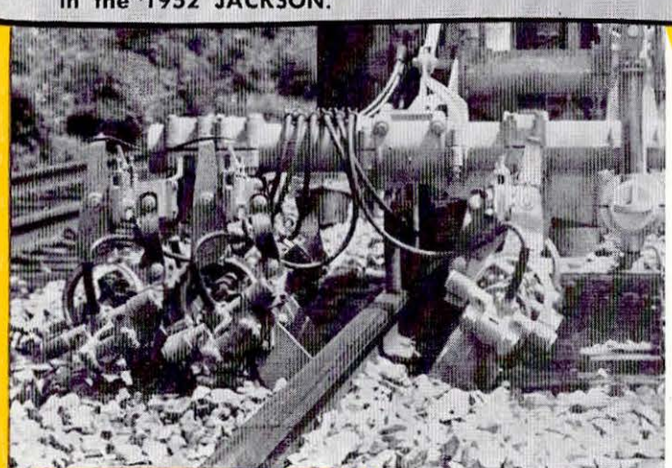
NO OTHER "MULTIPLE" MATCHES THE *Versatility* OF THE JACKSON!



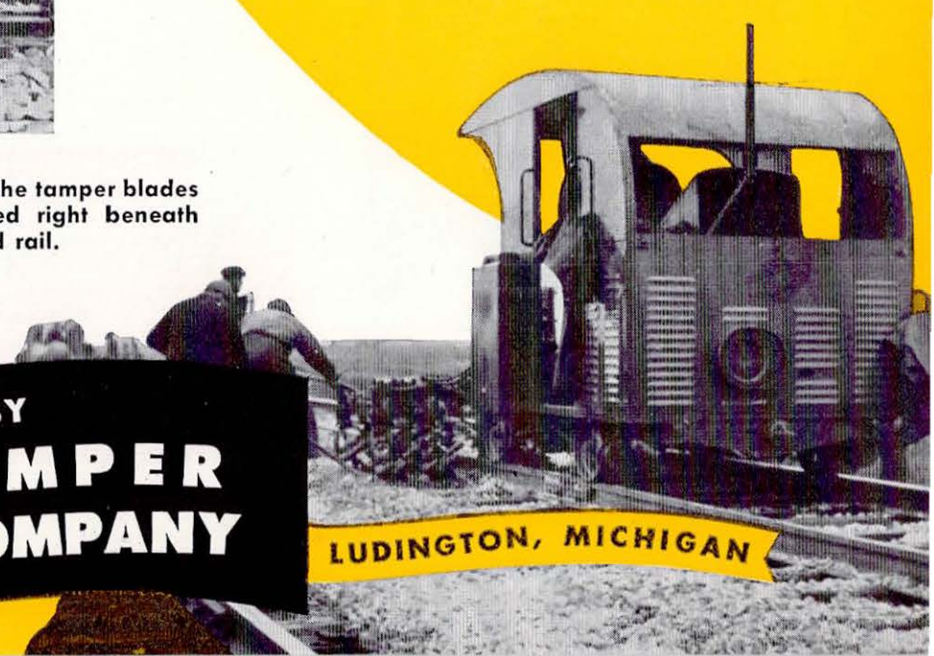
Effortless, rapid and exact hydraulic indexing from tie to tie is furnished at the turn of a control in the 1952 JACKSON.

- It is the ONLY power tamper that OPERATES WITH EQUAL EFFICIENCY IN ANY PRACTICABLE LIFT OF TRACK and IN ANY TYPE OF BALLAST,
- THAT IS AS PRACTICAL FOR USE IN REGULAR OUT-OF-FACE SURFACING AS IN MAKING NEW BALLAST INSERTIONS,
- THAT PROVIDES QUICKLY INTERCHANGEABLE BLADES AND QUICK ADJUSTMENT OF THE ENTIRE MACHINE SO THAT GREATEST EFFICIENCY IS ACHIEVED UNDER ALL CONDITIONS.
- IT IS THE ONLY POWER TAMPER IN WHICH THE TAMPING BLADES CAN BE DIRECTED TO PENETRATE TO, AND ACTUALLY TAMP THE *VITAL SPOT* — THE LOAD-BEARING ZONE, directly beneath the rail.
- And its powerful vibratory action coupled with the right amount of pressure, as exerted by the weight of the tamping crosshead, consolidates the ballast uniformly and thoroughly.

With a JACKSON Multiple on your track (available on a down-to-earth basis, if desired) we believe you will agree it will do a better, faster job with less men and at less cost than any other equipment available. Let us discuss it with you.



Note how the tamper blades are directed right beneath the tie and rail.



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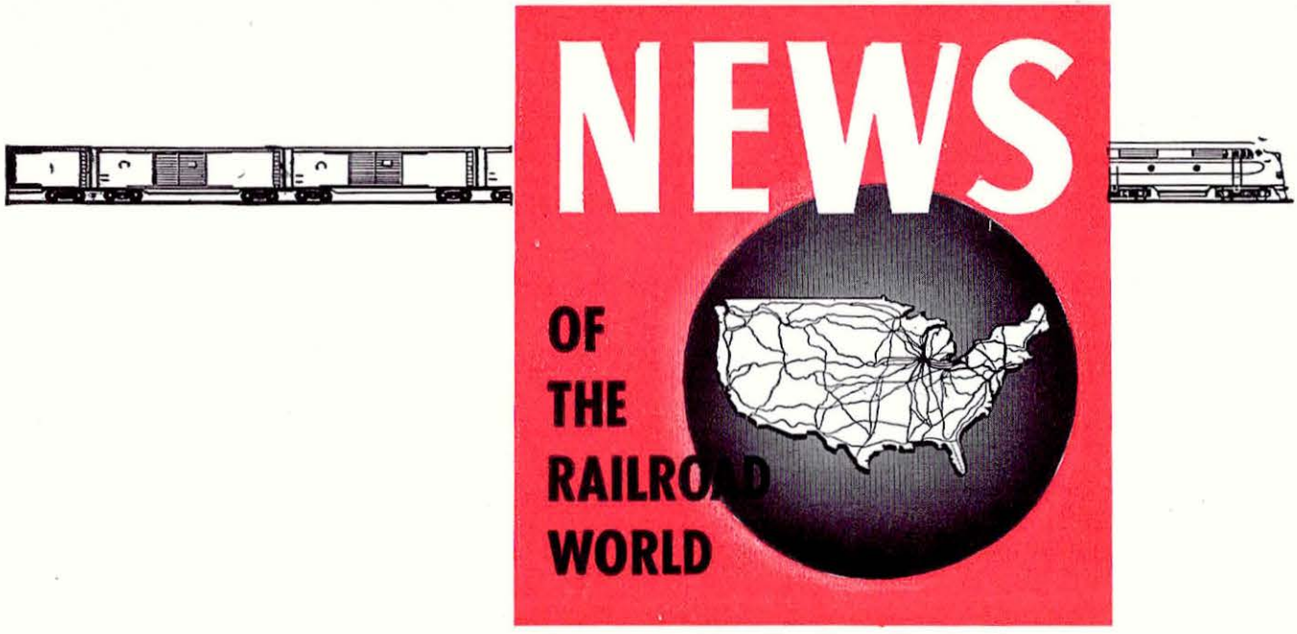


1952 Net Income Reaches $91 Million

Class I railroads in the first two months this year had an estimated net income, after interest and rentals, of $91,000,000, according to the Bureau of Railway Economics, Association of American Railroads. The 1952 figure compares with net income of $53,000,000 in the corresponding period last year.

Net railway operating income for the first two months of 1952 totaled $141,962,386. In the like 1951 period, the total was $98,153,367.

'51 Affected by Strikes

Earnings for February 1951 were "seriously affected" by railroad strikes at many principal terminals, with adverse effects extending throughout the country, the A.A.R. explained. This would account for the better showing in the two-month period of 1952.

Estimated results for February 1952 showed net income of $50,000,000 compared with a deficit of $3,000,000 in the same month last year. Net railway operating income for February was $75,894,510. In February 1951 it amounted to $18,977,500.

In the 12 months ended with February, the rate of return averaged 3.88 per cent, compared with 4.28 per cent for the 12 months ended with February 1951.

Gross in the first two months of 1952 amounted to $1,712,000,596 compared with $1,564,685,412 in the same period of 1951, an increase of 9.4 per cent. Operating expenses amounted to $1,335,056,113 compared with $1,253,704,201, an increase of 6.5 per cent. Twenty-two Class I roads failed to earn interest and rentals in the first two months this year. Eleven were in the Eastern district, one in the Southern region and 10 in the Western district.

Results by Districts

Class I roads in the Eastern district in the first two months of 1952 had an estimated net income of $34,000,000 compared with $4,000,000 in the same period of 1951. For February alone, their estimated net income was $18,000,000, compared with a deficit of $16,000,000 in February 1951.

Those same roads in the first two months of 1952 had a net railway operating income of $62,525,211, compared with $29,361,004 in the same period of 1951. They had a net railway operating income of $32,180,053 in February, compared with a deficit of $3,341,540 in February 1951.

Gross in the Eastern district in the first two months totaled $771,201,073, an increase of 10.8 per cent compared with the same period of 1951, while operating expenses totaled $619,373,013, an increase of 6.3 per cent.

Class I roads in the Southern region in the first two months had an estimated net income of $21,000,000 compared with $17,000,000 in the same period of 1951. For February, they had an estimated net income of $10,000,000, compared with $6,000,000 in February 1951.

Those same roads in the first two months had a net railway operating income of $28,171,325, compared with $23,093,043 in the same period of 1951. Their net railway operating income in February amounted to $13,877,096, compared with $9,320,526 in February 1951.

Gross in the Southern region in the first two months of 1952 totaled $256,524,642, an increase of 8.5 per cent compared with the same period of 1951, while operating expenses totaled $187,226,621, an increase of 4.4 per cent.

In the West

Class I roads in the Western district in the first two months of 1952 had an estimated net income of $36,000,000, compared with $32,000,000 in the same period of 1951. In February alone, they had an estimated net income of $22,-

CLASS I RAILROADS—UNITED STATES

	1952	1951
Month of February		
Total operating revenues	$844,966,485	$715,825,778
Total operating expenses	649,686,754	609,323,570
Operating ratio—percent	76.89	85.12
Taxes	105,892,108	72,276,680
Net railway operating income (Earnings before charges)	75,894,510	18,977,500
Net income, after charges (estimated)	50,000,000	Def. 3,000,000
Two Months Ended February 29, 1952		
Total operating revenues	1,712,000,596	1,564,685,412
Total operating expenses	1,335,056,113	1,253,704,201
Operating ratio—percent	77.98	80.13
Taxes	206,697,408	181,224,306
Net railway operating income (Earnings before charges)	141,962,386	98,153,367
Net income, after charges (estimated)	91,000,000	53,000,000

000,000, compared with $7,000,000 in February 1951.

Those same roads in the first two months of 1952 had net railway operating income of $51,265,850, compared with $45,699,320 in the same period of 1951. Their net railway operating income in February amounted to $29,837,361, compared with $12,998,514 in February 1951.

Gross in the Western district in the first two months of 1952 totaled $684,274,881, an increase of 8.2 per cent compared with the same period of 1951, while operating expenses totaled $528,456,479, an increase of 7.4 per cent.

Latest Car Study by D. T. A. Indicates Need for Higher Production Goals

The latest freight-car study by the Defense Transport Administration indicates a need for higher production goals which would contemplate the building of 11,000 cars per month during the 21-month period from next October 1 to July 1, 1954.

For the subsequent 12 months, from July 1, 1954, to July 1, 1955, the study also indicates, the monthly rate should be stepped up to 11,875 cars—if the fleet is to be put on a "full mobilization" basis.

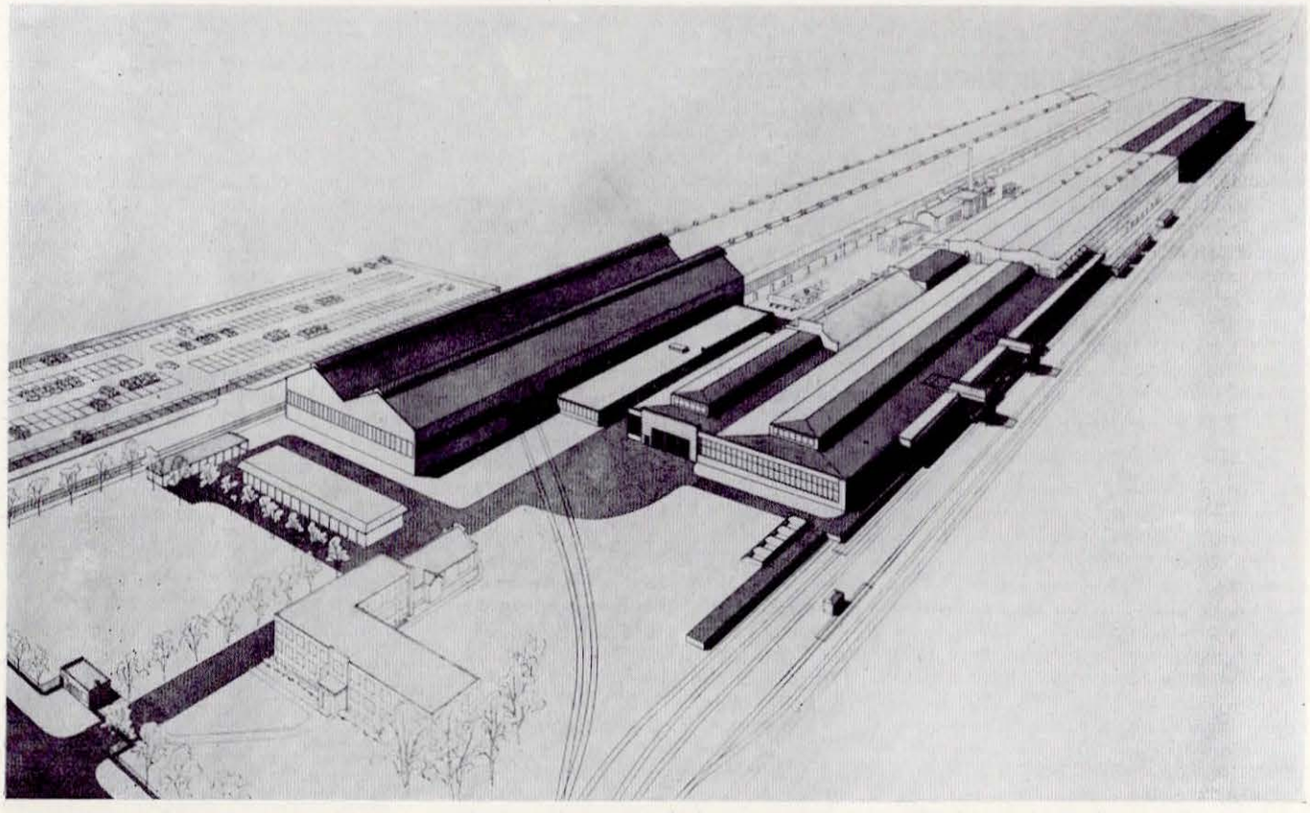
The building program, as now set up, contemplates a monthly production rate of 10,000 cars; but the allocating authorities have not been providing materials for the attainment of that goal. The new D.T.A. study was made public in Washington April 8, and on the evening of that day it was discussed by D.T.A. Administrator James K. Knudson in an address before the Columbia Traffic Club at Columbia, S. C.

The 11,000-car monthly program proposed in the study resulted from findings to the effect that all domestic freight-car ownership, except military and industrial, should total 2,167,000 cars by July 1, 1954. This would include an ownership of 1,867,000 cars by Class I roads. The program pledged by the Class I roads in July, 1950, contemplates an increase in their ownership to 1,850,000 cars by July 1, 1953.

As to the higher goals proposed in the D.T.A. study, the agency's April 8 announcement said that the American Railway Car Institute and the Association of American Railroads had advised that they could be attained "if sufficient materials are made available."

The proposed build-up to 2,167,000 cars by July 1, 1954, is justified on the basis of forecasts which indicate that traffic will then be on an annual basis of about 705.8 billion net ton-miles—3.5 per cent above the 1951 level, but still short of the "full mobilization" basis.

The latter is put at 850 billion net



WHEN ITS $5 MILLION plant modernization program is completed some time next fall, the Standard Railway Equipment Manufacturing Company will consolidate all major domestic manufacturing operations at Hammond, Ind. Heretofore freight car roofs have been made at New Kensington, Pa., while car ends, metal floor protectors, coupler devices and other products came from the Hammond plant. The company felt that the New Kensington plant—originally a foundry—had become outmoded from the standpoint of both structure and layout. That, plus the fact that the Hammond plant was more advantageously located for the increasing shipments of roof products to the west, brought on the decision to concentrate.

The new buildings (shown here in shaded tones) include modernized and expanded facilities for manufacturing products that have been produced at Hammond all along. In addition there is a special personnel building. Previous plant area (shown in outline form) totalled 292,200 sq. ft. To this the building program will add 224,250 sq. ft., plus the parking area, which will accommodate 435 cars.

Among the most important facilities to be installed is a new hydraulic press of 4,000 tons capacity—said to be the largest of its kind in the railroad supply industry. This press and its installation involves an investment of over $1 million. A new product development department also will be housed in the new buildings.

ton-miles, which is the basis for the proposal that monthly production be stepped up to 11,875 cars for the 12-month period from July 1, 1954, to July 1, 1955. That would be for the purpose of building the total fleet to 2,239,000 cars. The call for a July 1, 1955, fleet of that size assumed that car-utilization would be on the bases attained in October, 1946, and October, 1948.

The study also had figures indicating that on another basis of "full mobilization" (utilization being on the bases attained in October, 1943, and October, 1944), the total fleet should be 2,370,653 cars by July 1, 1957. The proposed monthly production figures, however, do not go beyond July 1, 1955.

Building of the fleet to 2,167,000 cars by July 1, 1954, would require the net addition of 122,000 cars to the present fleet, according to the study. To do this, in the face of prospective retirements, would require the building of 296,500 new cars during the period from the beginning of this year until July 1, 1954. And another 142,500 would have to be constructed to build the fleet to the July 1, 1955, goal of 2,239,000 cars.

In his Columbia, S. C., address, Administrator Knudson said: "This study is the outgrowth of our deep concern at D.T.A. over the fact that up to now freight car programs have been based on surveys made immediately following the outbreak of the Korean conflict, and have been designed only to provide an increase in car ownership to protect the gradual build-up of the defense effort. They did not provide for increases sufficient to meet the demands of full mobilization or all-out war. The failure to meet even these present programs means that we are falling far short of sufficient ownership to protect the nation's needs in the event of a sudden, more serious emergency."

Mr. Knudson also commented on the difficulty of obtaining materials for building freight cars during a period of emergency. "If," he said, "we can learn from past transportation history that the time to build up the freight car fleet is *before* the sharp ax of war or national emergency falls, and not afterwards, all the troubles and vicissitudes of the past will not have been in vain."

Congress Okays "Stop-Gap" Extension of War Powers

Congress last week passed a resolution extending until June 1 the President's so-called war time powers. These powers, which encompass some 59 different acts, include the authority to seize and operate the railroads. It was under this power that the government took over the railroads in August 1950, and under which it has operated the carriers since that date.

This congressional action followed a request of "utmost urgency" which the President sent to Congress April 7. In his message the President pointed out that the existing war powers would terminate when the Japanese treaty becomes effective, unless Congress extends them. Thus the need for an "interim" action.

Meanwhile, hearings are continuing on whether the wartime powers should be extended for the duration of the present "national emergency."

Representative Feighan, Democrat of Ohio, is chairman of the House Judiciary subcommittee conducting these hearings. In a speech on the floor of the House last week he said it is "highly questionable" whether the power to seize and control transportation systems should be extended.

Leaders of three operating brotherhoods—the Brotherhood of Locomotive Firemen & Enginemen, Brotherhood of Locomotive Engineers, and Order of Railway Conductors — have told the House group they oppose extension of this authority. They charged the government has used the power to effect a "sham" seizure of the railroads, thereby depriving employees of their economic power while adding to the economic power of the carriers.

James P. Shields, grand chief engineer of the B.L.E., told the subcommittee the seizure power is being used "to visit widespread and grievous injustices upon our members." He recommended that if power to seize transport systems is extended, it be modified by the provisions of the so-called Murray bill.

The Murray bill (S.2937), recently introduced by Senator Murray, Democrat of Montana, would require, among other things, that the government impound railroad income during the period of seizure. (*Railway Age*, April 7, page 13.)

The three unions opposing extension of the seizure power are presently engaged in court action at Cleveland, Ohio, in an attempt to have the existing seizure of the railroads declared illegal.

Prior to hearing the three "op" chiefs oppose extension of authority permitting seizure, the House subcommittee received testimony from Francis A. Silver, general counsel of the Defense Transport Administration.

Mr. Silver noted that extension of the war powers would extend the President's authority under section 1 (15) of the Interstate Commerce Act. This section provides that in time of war or threatened war the President may certify to the Interstate Commerce Commission that certain traffic essential to the national defense shall be given priority.

Continuance of present war powers would allow this section to be used, if needed, without a new declaration of "threatened war," Mr. Silver said.

Canada's Chief Regulator Gets I.C.C. "Know-How"

Chief Commissioner John D. Kearney, of Canada's Board of Transport Commissioners, and five members of the board's staff, were in Washington last week "picking up a little know-how" from the Interstate Commerce Commission.

That's how Mr. Kearney summed up the purpose of his visit, which he said

U. S. Army photo

THE BIG WINDS hit the railroads, too! Here a boxcar lifted off its wheels by the recent tornado—worst in Arkansas history—is righted on a Missouri Pacific siding in Judsonia as the community began to dig its way out of the rubble. Witnessing the operation are Maj. Roy Martin (foreground) of the Arkansas Military Department and Sgt. Alan Koehler (in front of Major Martin), correspondent from the Army Home Town News Center in Kansas City.

was "private" in the sense that "we didn't come officially." He made his statement at an April 8 press conference in the office of Acting Chairman Clyde B. Aitchison of the I.C.C.

They are "just surveying us," was the way Mr. Aitchison put it. And he recalled that it was more than 30 years ago, "shortly after World War I," that a Canadian commissioner had previously visited the I.C.C.

Mr. Kearney and his staff were guests of the I.C.C. members at an April 8 dinner in Washington's Cosmos Club. On the following day Mr. Kearney sat on the bench as a "guest listener" with the commission's Division 4.

Mr. Kearney said that he and his staff were interested principally in obtaining information about the accounting classification, and the commission's decisions in the uniform-class-rate and uniform-classification cases (Nos. 28300 and 28310). As to the former, Mr. Kearney explained that the Canadian Parliament has passed legislation requiring the board to promulgate a uniform system of accounts for Canadian railroads. The I.C.C. system is "the system we advocate," he added.

His interest in the rate and classification cases, Mr. Kearney explained, arose out of the fact that the Canadian board is now embarked on a general investigation with a view to "revising and streamlining our rate structure." He thought the commission might help on this task which is similar to the one "so well accomplished here."

In closing, Mr. Kearney expressed his appreciation for the "warm hospitality" extended to him and his associates by the commission and its staff.

11 Roads Seek Solution To Seatrain "Problems"

Eleven railroads have asked the Interstate Commerce Commission to settle once and for all the matter of how Seatrain Lines fits into the national transportation picture.

In an April 3 complaint to the commission, the roads said 20 years of "piecemeal controversies" have failed to resolve the relationship between Seatrain and the railroads. The time has come, they said, when there ought to be a "definitive and overall solution" to the many problems involved.

These problems include establishment of through routes, rates, divisions, car service and per diem, and Seatrain's "selective cargo system." Such problems arise, the roads said, out of trying to fit "an intermediate rail carrier" which "extends the rails out across the sea" into the overall transportation system.

The I.C.C. should review Seatrain-railroad relationships "realistically," the roads said. They charged it is "largely irrelevant" that Seatrain's tracks move over water, carrying railroad cars with them, rather than being built as stationary rails on land with cars moving over them by motive power.

The complaint went on to say that Seatrain, although invited to do so by the commission, has not come to it with alleged grievances. Instead, it has filed an antitrust suit in federal court in New Jersey, directed against 11 railroads, the Association of American Railroads, and six traffic associations and committees. This suit, the complaint said, is an "apparent effort to coerce the railroad defendants there into arrangements satisfactory to Seatrain. . ."

"It is insufficient, for a long-term solution, merely to establish that the court has neither jurisdiction nor authority to contrive this solution, nor should the railroads continue to await the piecemeal solution of the problems by this commission in isolated controversies," the complaint continued. "Instead, it is in the public interest that there be a comprehensive examination or reexamination of all the difficult issues between Seatrain and the railroads."

Named as "adversary defendants" to the complaint, in addition to Seatrain, were 11 railroads. Nearly all other roads in the country were listed as co-defendants. Included were those which have, or might have, through routes with Seatrain or which may own cars that might be interchanged with Seatrain. This was done, the complaint said, "so that the commission in the exercise of its jurisdiction. . .may grant full, appropriate and complete relief."

Seatrain holds operating authority generally between Edgewater, N. J., Savannah, Ga., Belle Chasse, La., and Texas City, Tex. Among the 11 roads filing the complaint were the Atlantic Coast Line; Baltimore & Ohio; Erie; Louisville & Nashville; Pennsylvania; or Seaboard Air Line and Southern.

The 11 "adversary defendant" roads named in the complaint include the Central of Georgia; Chicago, Rock Island & Pacific; Fort Worth & Denver; Missouri-Kansas-Texas of Texas; Missouri Pacific; International-Great Northern; New York, Susquehanna & Western; Texas & New Orleans; and Texas & Pacific.

British Rail Executives Study American Methods

David Blee, member for commercial affairs of the British Railway Executive, and A. J. Pearson, chief officer for administration, are presently in the United States to study American railway methods, with particular emphasis on yard and terminal operation.

Nickel Plate Also Uses Electronic Scale

On page 33 of the March 31 *Railway Age* there was published a description of new yard facilities built and used jointly by the Pennsylvania and the New York, Chicago & St. Louis, to serve a coal preparation plant of the Hanna Coal Company at Georgetown, Ohio. This article was followed on page 36 of the same issue by a description of an automatic electronic track scale used in that yard.

The second article implied that the scale is used only by the Pennsylvania, whereas it is actually used by both roads. The Nickel Plate, in fact, constructed the scale house, while the Pennsylvania furnished the scale. The expense of the complete installation was borne by both companies.

Rogers Becomes Director Of N.P.A. Railroad Unit

Richard W. Rogers, chief mechanical officer of the Seaboard Air Line, has become director of the National Production Authority's Railroad Equipment Division. He succeeded Guy Otis Beale, vice-president of the Chesapeake & Ohio.

D.&H. Loses Case Involving Its Boston Holding Co. Stock

The Supreme Court has refused to review a Massachusetts court ruling on so-called publicly-held preferred stock of the Boston Railroad Holding Company. This stock is that part of the holding company's preferred issue which was sold and guaranteed by the New York, New Haven & Hartford.

The court proceeding was brought by the Delaware & Hudson, one of these public holders, in an undertaking to gain for its stock priority in the B.H.C. liquidation over shares of the same issue which were retained by the New Haven.

The Massachusetts court held that any priority accruing to the publicly-held stock was destroyed by the 1947 decree that brought the New Haven out of reorganization.

A group of other stockholders joined the D.&H. in asking the Supreme Court to review the case. These stockholders claimed the lower court did not give effect to a provision in the New Haven reorganization plan which they interpreted as having "expressly directed" that they be given priority treatment.

The New Haven has owned the B.H.C. since the latter was created in 1909. It was set up to hold Boston & Maine stock previously acquired by the New Haven.

Senate Committee Concludes Hearings

A spokesman for the Department of Commerce last week told the Senate Interstate Committee the department is opposed to pending legislation designed to speed up railroad rate increases and rewrite the rate-making rule of the Interstate Commerce Act.

C. Dickerman Williams, solicitor for the department, said his agency "recognizes and is most sympathetic to the need for reducing extensive delays" in railroad rate cases. He added, however, that S. 2518, the bill to reduce such

delays, "goes too far beyond the necessities."

Mr. Williams also opposed S. 2519, a proposal that would add new elements to the rule of rate-making. The bill, Mr. Williams said, is "impracticable and conceivably unduly restrictive of the discretion of the (Interstate Commerce Commission)."

These two bills are among the more than 30 proposals on which the Senate committee has been conducting hearings since March 3. The committee concluded its hearings last week.

S. 2518 and S. 2519 aroused considerable controversy during the hearings. Three railroad presidents testified in their support, while several shipper groups and government agencies joined in opposition.

As was the case with several other witnesses, the Commerce Department offered its own idea on how to reduce the "time lag" factor in rate cases. Mr. Williams said Congress should, by joint resolution, request the I.C.C. to conduct hearings on this matter and then report back to Congress on what it regards as the appropriate solution.

Another conflict was pointed up during final sessions before the Senate committee. C. H. Buford, retired president of the Chicago, Milwaukee, St. Paul & Pacific, appeared as a witness in opposition to the "penalty per-diem" bills, S. 1018 and S. 2350. He said such legislation is "basically unsound," and added that he is "firmly convinced" that passing either of these bills would not promote greater efficiency in the use of freight cars.

Mr. Buford spoke on behalf of 21 major railroads. Among these were the Atlantic Coast Line; Baltimore & Ohio; Boston & Maine; Chicago & North Western; Chicago, Milwaukee, St. Paul & Pacific; Chicago, Rock Island & Pacific; Delaware, Lackawanna & Western; Missouri Pacific; New York Central; Pennsylvania; Seaboard Air Line; Southern Pacific; Southern, and Union Pacific.

"Objectives" of Bills

Eldon Martin, general counsel for the Chicago, Burlington & Quincy, testified the following day in support of the "objectives" of these same bills. He said he spoke for five western roads, in addition to his own. These were the Atchison, Topeka & Santa Fe; Denver & Rio Grande Western; Great Northern; Gulf, Mobile & Ohio, and Northern Pacific.

Mr. Martin said the objective of getting more freight cars can be realized by encouraging the establishment and maintenance of per diem charges at a figure "which will make it more attractive to an individual railroad to buy and own cars rather than rely upon its ability to use the cars of some other railroad received in interchange."

Charles E. Blaine, traffic manager for several livestock groups, and Lee J. Quasey, commerce counsel for the National Livestock Producers Association, told the committee April 4 that approval of the "sweeping provisions" of S. 2518 would permit the railroads to "usurp" the rate making provisions of the I.C. Act.

The railroads are "clearly wrong," Mr. Blaine said, in placing the blame for their troubles on the "time lag" in rate cases or on failure of the I.C.C. to approve the full increases requested.

Mr. Blaine commented also on several of the other bills before the committee. He said passage of S. 2754, which would repeal the long-and-short haul clause, "would turn the hands of progress backward more than 42 years." He called S. 2519 "unsound," and opposed bills that would restrict leasing of motor vehicles or the application of the agricultural and fish exemption for motor carriers.

Chester C. Thompson, president of American Waterways Operators, testified April 7 in opposition to bills that would impose user charges on inland waterways or required abandonment of waterways on which income from user charges is less than the cost of operation and maintenance. These are, respectively, S. 2743 and S. 2744.

SOME 300 DELEGATES to the recent Los Angeles meeting of the Association of American School Administrators were special studio guests at a broadcast of "The Railroad Hour." Here Gordon MacRae, "host" of the weekly program (standing, center), greets Dr. J. Cloyd Miller, superintendent of schools for Deming, N. M., and president of the National Education Association. Metropolitan Opera star Dorothy Kirsten is in the foreground.

I.C.C. Revises Regulations On Transfer of Motor Rights

Division 5 of the Interstate Commerce Commission has issued an order modifying the commission's rules and regulations with respect to transfers for limited periods motor-carrier operating rights and limited-period contracts to operate under such rights. In issuing the order, dated April 7, the division followed through from a "notice of proposed rule-making" which it had issued February 1.

The revised rules include a provision stipulating that, "unless unusual circumstances are involved," an application for transfer of rights for a limited period "will not be approved for a period of more than one year, during which time the parties will be expected to. . .determine whether they want to enter into a permanent transaction of sale and purchase. . . ." Nothing in this, however, is to be construed "as approving a sale and purchase of operating rights in advance of application therefor."

Another of the revised rules requires that a maximum rental for rights involved in a limited-period transfer must be stated in dollars.

Award to A.A.R.

The Freedoms Foundation, Valley Forge, Pa., has presented one of its honor medals to the Association of American Railroads for the latter's contribution to the American way of life through its advertising program. The presentation was made April 2 at ceremonies in the old Supreme Court chamber of the Capitol at Washington.

The foundation also presented to the Dudley Pictures Corporation a certificate of merit in connection with its production of the A.A.R.'s motion picture "On the Track."

Anti-Trust Complaint Filed Against Signal Companies

An anti-trust complaint against three signal companies was filed April 9 by the Department of Justice in the United States District Court at Buffalo, N. Y. The complaint is a civil action and the defendant companies are the General

THE THIRD ANNUAL MEETING of advertising managers, sales promotion managers and public relations directors of companies comprising the Diesel Engine Manufacturers Association was held recently at Chicago's Union League Club, with about 35 executives of D.E.M.A. member companies in attendance. Henry J. Barbour, sales promotion and public relations manager of Fairbanks, Morse & Co., was chairman of the meeting. Highlights of the program included a talk by Robert B. Craig, of D.E.M.A., and a presentation on "Dieselization of American Railroads" by Volney B. Fowler, in charge of advertising and public relations for the Electro-Motive Division of General Motors Corporation.

Railway Signal Company, Westinghouse Air Brake Company, and Western Railroad Supply Company.

They are charged with conspiring to monopolize the manufacture and sale of grade-crossing protection devices in violation of the Sherman act. The filing of the suit was announced in Washington by the Justice Department.

Seatrain Lines Joins Short Line Association

Seatrain Lines, Inc., has become a member of the American Short Line Railroad Association. Seatrain is complainant in an anti-trust suit filed last December against a number of railroads and railroad associations, including the Association of American Railroads and territorial traffic associations.

More recently, it petitioned the United States District Court at Trenton, N. J., to restrain eight roads and the A.A.R. from "boycotting" its service between New York and Savannah, Ga. (*Railway Age*, March 24, page 16, and December 17, 1951, page 17.)

Frozen Foods Lower R.I. Menu Prices

Patrons of the Rock Island's "Des Moines Rocket" were pleasantly surprised on April 1 by price cuts that appeared in the train's dining car menu. The cuts averaged 15 per cent and were the passengers' first evidence that the road's program of using frozen foods had gotten under way. The service will be extended to other "Rocket" trains very shortly (*Railway Age*, January 28, page 21).

In the converted dining car kitchens, propane-heated warming ovens have supplanted coal ranges and space-consuming steam trays. The food, precooked and quick-frozen at the Rock Island's Chicago commissary, is stored in the cars' freezer units. Restoration in the warming oven takes about 10 to 15 minutes, depending on the meal. Portions served are larger than those which the patrons received under the traditional cooking methods.

The Rock Island has hinted that further cuts in menu prices may be in the offing — after the dining car department has gained more experience and more converted diners have been placed in service.

New York Central Programs Sleeping Car Improvements

The New York Central is undertaking a series of improvements to its streamlined sleeping cars, according to Gustav Metzman, president. The improved cars will be used together to obtain maximum riding benefits. Work is under way in the road's own shops and in those of the Pullman-Standard Car Manufacturing Company, with the first complete improved trains expected to go into operation late this spring, Mr. Metzman said. The initial phase of the program involves changes to 76 cars.

Interior changes include a newly developed starter for fluorescent lights to insure instant response; redesign of room air-conditioning apparatus; additional or relocated clothing hooks; new designs of latches for roomette doors; spring hinges for roomette wardrobe doors; devices on window blinds to insure exclusion of light when blinds are closed; and improved lavatory foot pedal mechanism; springs on shoe locker doors to insure latching; and canvas or rubber sleeves to prevent noise from folding bed springs.

Other changes are latest-type shock absorbers to cushion lateral and vertical action; improved swing hanger connection in combination with rubber coil springs of circular design to produce smoother lateral action; noise reduction by redesigning ends of cars and incorporating special rubber springs in coupler support arrangements.

Mechanical changes include refinement of power generating equipment; devices to prevent wheels from sliding; and improved lubrication of journal roller bearings.

Delaware & Hudson Nears Complete Dieselization

All Delaware & Hudson motive power will be dieselized in the near future, according to the road's recently released annual report. Experience gained by the management in utilizing diesel-electric locomotives has indicated that their flexibility of operation, either singly or in multiple units, their lower operating and maintenance cost, and reduced time out of service, has justified their substitution for steam, J. H. Nuelle, president, said in the report.

When diesel units now on order are delivered, which is scheduled for the period August 1952 to November, the road's diesel fleet will total 169 units, 118 of the 1,500-hp. road-haul type and 51 of the 1,000-hp. yard-switching type, Mr. Nuelle added.

A.A.R. Turns Down Unicel Car—Temporarily

The Mechanical Division of the Association of American Railroads has —temporarily at least—not approved the Pressed Steel Car Company's "Unicel" combination refrigerator-box car of cellular laminated wooden construction.

The car was the major subject of a meeting of the division's General Com-

mittee which, in a resolution, considered the car "a step backward primarily because of experience with wood cars in the past" and because of the difference in maintenance methods—and maintenance expense—it would entail. The committee pointed out that: "Wood-working machinery on all railroads has been practically eliminated or so severely curtailed that maintenance of wood cars would introduce added capital expenditures."

The committee agreed that the car, in new condition, had more than adequate strength. But it questioned that the car would retain that strength over a full period of service life. That, the committee felt, was something to which only time would reveal the answer.

The committee's action, however, does not restrict railroads from buying the car for use on their own lines.

John I. Snyder, Jr., president of the Pressed Steel Car Company, announced on April 10 that it was the company's aim to prove "Unicel" to the satisfaction of all potential users for unrestricted interchange service on the nation's railroads.

Mr. Snyder disclosed that while the A.A.R. had no objections to individual railroads using the "Unicel" on their own lines, the association had recommended that "no cars of this type be built for interchange service except in the event of a national emergency which would restrict steel in freight car building . . . because maintenance of such cars would necessitate additional capital expenditures."

Stressing Unicel's steel-saving advantages of "between 11 to 20 tons per car," he emphasized that "the steel shortage has grown more acute since 'Unicel' was first proposed and our national steel emergency situation may be upon us sooner that most Americans think. Many authorities say it is here now.

"Until sufficient new steel-making facilities begin turning out the vast quantities of steel America now requires, we will continue to have a serious freight-car shortage weakening both the nation's transportation system, of which it is such a vital part, and our defense rearmament program. Steel alone won't answer the freight-car shortage. For car builders are simply not getting the necessary amounts of steel in proper balance. Besides, 'Unicel' cars can be built 20 per cent faster than conventional steel freight cars."

Pressed Steel Car will continue with development work in applying the "Unicel" material and principle to fields other than railroads, Mr Snyder said, adding: "To date we have made Unicel truck trailers, shipping containers and houses."

S. P. of M. Renamed Pacific Railroad

The former Southern Pacific of Mexico, which was recently purchased from the Southern Pacific by the Mexican government (*Railway Age*, December 31, 1951, page 57), has been renamed the Pacific Railroad (Ferrocarril de Pacifico).

Mexican Rail Employees Seeking Higher Pay

Unions representing employees of Mexican railroads are said to be seeking wage increases of five pesos (57 cents) per day for their members. Any wage increase would reportedly be followed by some increase in freight rates.

Main-line passenger fares have already been increased. Second-class fares have been raised by 16 2/3 per cent, but the first-class increase has

$2.2 BILLION SPENT FOR MATERIALS, SUPPLIES

Class I railroads in 1951 spent $2,175,859,000 for fuel, materials and supplies of all kinds used in connection with their operations, the Association of American Railroads announced on April 14. This exceeded the amount spent in 1950 by $435,951,000, and it topped the total for any previous year except 1948.

Selected Income and Balance-Sheet Items of Class I Steam Railways in the United States

Compiled from 127 reports (Form IBS) representing 131 steam railways

(Switching and Terminal Companies Not Included)

	United States			
	For the month of November		For the eleven months of	
	1951	1950	1951	1950
1. Net railway operating income	$95,008,469	$109,874,446	$807,862,932	$925,024,752
2 Other income	16,904,528	18,737,457	200,959,221	206,775,866
3 Total income	111,912,997	128,611,903	1,008,822,153	1,131,800,618
4. Miscellaneous deductions from income	4,543,891	3,581,547	51,231,198	42,289,111
5. Income available for fixed charges	107,369,106	125,030,356	957,590,955	1,089,511,507
6. Fixed charges:				
6-01. Rent for leased roads and equipment	10,656,082	10,544,511	102,777,437	113,475,919
6-02. Interest deductions[1]	25,582,794	25,000,325	275,526,552	275,505,763
6-03. Amortization of discount on funded debt	265,715	254,015	2,649,978	2,477,179
6-04. Total fixed charges	36,504,591	35,798,851	380,953,967	391,458,861
7. Income after fixed charges	70,564,515	89,231,505	576,636,988	698,052,646
8. Other deductions	2,806,294	3,145,871	33,902,812	35,511,206
9. Net income	68,058,221	86,085,634	542,734,176	662,541,440
10. Depreciation (Way and structures and Equipment)	38,110,553	36,486,851	412,317,867	392,673,578
11. Amortization of defense projects	5,585,978	1,128,108	45,143,036	14,743,498
12. Federal income taxes	66,204,686	68,770,893	514,967,332	497,920,838
13. Dividend appropriations:				
13-01. On common stock	54,684,807	73,180,993	218,233,745	210,350,804
13-02. On preferred stock	7,894,884	12,814,806	81,750,380	71,684,849
Ratio of income to fixed charges (Item 5 ÷6—04)	2.94	3.49	2.51	2.78

Selected Expenditure and Asset Items	United States Balance at end of November 1951	1950
17. Expenditures (gross) for additions and betterments—Road	$317,365,047	$248,892,841
18. Expenditures (gross) for additions and betterments—Equipment	954,671,467	719,418,320
19. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707)	477,235,699	466,116,543
20. Other unadjusted debits	136,518,627	107,904,245
21. Cash	936,068,743	1,086,871,123
22. Temporary cash investments	897,861,205	1,014,309,580
23. Special deposits	60,728,601	119,584,026
24. Loans and bills receivable	2,034,662	1,640,619
25. Traffic and car-service balances—Dr.	57,530,939	54,397,314
26. Net balance receivable from agents and conductors	170,636,330	150,905,688
27. Miscellaneous accounts receivable	417,906,945	389,976,768
28. Materials and supplies	906,671,849	705,713,315
29. Interest and dividends receivable	16,929,157	17,749,501
30. Accrued accounts receivable	212,952,874	206,412,684
31. Other current assets	35,535,241	36,782,317
32. Total current assets (items 21 to 31)	3,714,906,546	3,784,342,935
Selected Liability Items		
40. Funded debt maturing within 6 months[2]	$177,738,564	$150,419,428
41. Loans and bills payable[3]	3,479,651	1,934,869
42. Traffic and car-service balances—Cr.	107,697,224	118,174,851
43. Audited accounts and wages payable	540,337,666	572,559,707
44. Miscellaneous accounts payable	197,348,666	217,622,549
45. Interest matured unpaid	26,809,657	40,404,822
46. Dividends matured unpaid	19,842,810	23,460,321
47. Unmatured interest accrued	86,914,100	84,713,139
48. Unmatured dividends declared	71,412,942	85,415,847
49. Accrued accounts payable	260,583,896	191,089,175
50. Taxes accrued	919,050,076	838,153,715
51. Other current liabilities	88,926,774	96,005,591
52. Total current liabilities (items 41 to 51)	2,322,403,462	2,269,534,586
53. Analysis of taxes accrued:		
53-01. U. S. Government taxes	754,032,480	683,157,415
53-02. Other than U. S. Government taxes	165,017,596	154,996,300
54. Other unadjusted credits	309,882,007	291,565,396

[1] Represents accruals, including the amount in default.
[2] Includes payments of principal of long-term debt (other than long-term debt in default) which becomes due within six months after close of month of report.
[3] Includes obligations which mature not more than one year after date of issue.
Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission.
Subject to revision.

been held down to nominal figures by combining rail and Pullman fares into a single rate.

Freight Car Loadings

Loadings of revenue freight in the week ended April 5 totaled 707,142 cars, the Association of American Railroads announced on April 10. This was a decrease of 18,281 cars, or 2.5 per cent, compared with the previous week; a decrease of 32,381 cars, or 4.4 per cent, compared with the corresponding week last year; and an increase of 7,093 cars, or 1.0 per cent, compared with the equivalent 1950 week.

Loadings of revenue freight for the week ended March 29 totaled 725,423 cars; the summary for that week, compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, March 29

District	1952	1951	1950
Eastern	134,515	142,581	136,091
Allegheny	155,069	157,885	151,976
Pocahontas	56,906	59,586	64,102
Southern	129,274	132,575	129,256
Northwestern	73,795	82,473	70,910
Central Western	115,256	121,623	110,194
Southwestern	60,608	58,712	57,875
Total Western Districts	249,659	262,808	238,979
Total All Roads	725,423	755,435	720,404
Commodities:			
Grain and grain products	43,490	48,099	40,284
Livestock	7,491	6,876	7,381
Coal	136,759	134,362	169,538
Coke	15,396	15,970	13,032
Forest products	42,174	46,153	38,968
Ore	21,674	19,816	13,278
Merchandise l.c.l.	77,155	82,925	86,469
Miscellaneous	381,284	401,234	351,454
March 29	725,423	755,435	720,404
March 22	719,921	748,878	717,259
March 15	708,826	745,128	725,534
March 8	714,247	749,522	707,911
March 1	755,624	785,861	574,449
Cumulative total 13 weeks	9,338,067	9,493,958	8,124,005

S.P.'s TAX RATE? IT'S $2.41—PER SECOND

Stockholders of the Southern Pacific Company have been given a clear picture of just where their potential profits have gone.

In a recent letter to the owners of the road President D. J. Russell explained that:

- **Taxes paid by the company in 1951 totaled more than three times all dividends paid to stockholders in the same year.**
- **The company's 1951 taxes were equivalent to $17.71 per share on all stock outstanding. (The company's consolidated net income in 1951 was only $11.62 per share.)**
- **The $76,000,000 paid out to tax collectors in 1951 did not include any of the taxes collected on ticket purchases and freight charges, which go directly to the federal government.**
- **To meet tax payments alone, the company had to earn $2.41 every second—24 hours a day!**

Gordon and Mather Receive Honorary Degrees

Donald Gordon and William A. Mather, presidents, respectively, of the Canadian National and of the Canadian Pacific, have been awarded the honorary degree of Doctor of Laws by the University of Western Ontario. Both degrees were conferred in recognition of "the great contribution of railways to the development of Canada, politically and economically."

Another "Griffin Plan" for New England Shippers

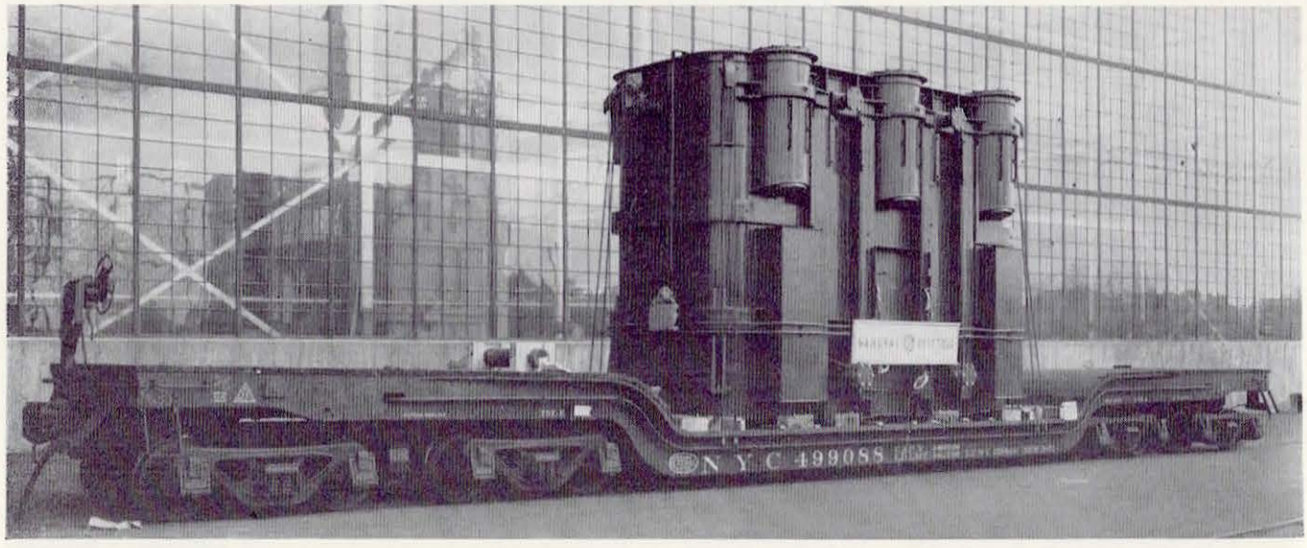
Another "Griffin Plan" type L.C.L. consolidating operation, based on the New York, New Haven & Hartford's Station at New London, Conn., will go into effect April 14. The plan is sponsored jointly by the Greater New London Chamber of Commerce, the Norwich, Conn., Chamber of Commerce and the Chamber of Commerce of Westerly, R. I.

The territory served by this new operation includes: On the "Shore Line" — Old Saybrook, Conn., to Kenyon, R. I.; on the New London-Worcester, Mass., line—New London to Dayville; and on the Providence-Hartford line—Plainfield to Willimantic.

MORE NEWS ON PAGES 56-70

Additional news appears on page 56, with regular news departments beginning on the following pages:

Equipment and Supplies	56
Organizations	56
Supply Trade	57
Car Service	58
Construction	58
Abandonments	58
Financial	62
Railway Officers	65

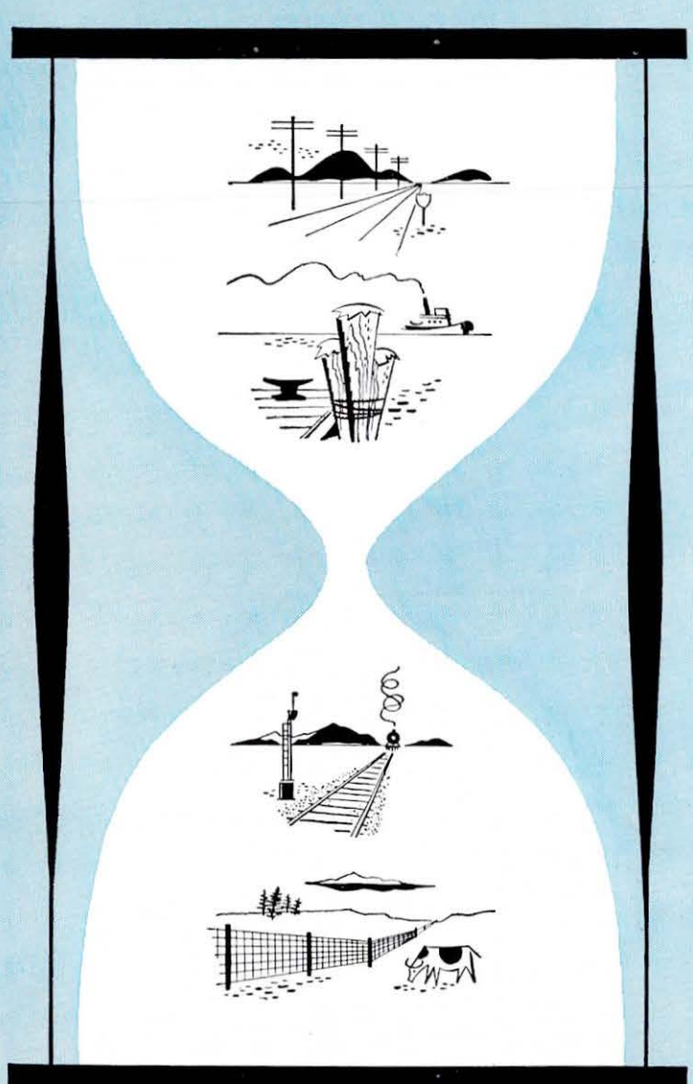


THE NEW YORK CENTRAL specially designed this long car to ship large General Electric Company power transformers. It is one of six (*Railway Age*, October 22, 1951, page 60), which will eventually be used to transport the large G.E. units. The drop-frame construction was designed to make clearance possible through tunnels and under low bridges. The car is 67½ ft. long, weighs 160,000 lb. and has 16 wheels supporting a 25-ft. platform. Its nominal load capacity is 340,000 lb. On the car is a 125,000 kva. transformer, built at G.E.'s Pittsfield, Mass., works. It is encased in a one-piece tank and is one of the largest designed this way by the company.

Of all wood
preservatives... only

Coal-Tar Creosote

has been proved in the
test of **time**



FOR MORE THAN 100 YEARS, UNDER THE MOST SEVERE AND EXACTING CONDITIONS, Coal-tar Creosote—and ONLY Coal-tar Creosote—has been proved successful.

IN COLD CLIMATES, Barrett* Coal-tar Creosote does not weaken wood—allows wood to retain maximum strength. Poles sustain weight of ice, resist storms.

IN HOT CLIMATES, Barrett Coal-tar Creosote stays longer in the wood. Protects against termites and decay.

IN DRY CLIMATES, Barrett Coal-tar Creosote retards splitting, brooming and shattering of crossties—reduces checking and splitting of poles. Its lubricating action on wood fibres reduces mechanical wear on crossties.

IN SWAMP AREAS, Barrett Coal-tar Creosote fights off decay. Resists high moisture content and infection from other decaying wood and debris.

IN FRESH WATER, Barrett Coal-tar Creosote resists leaching action. Negligibly soluble in water, it is ideal for submerged structures and structures exposed to rapidly-moving water.

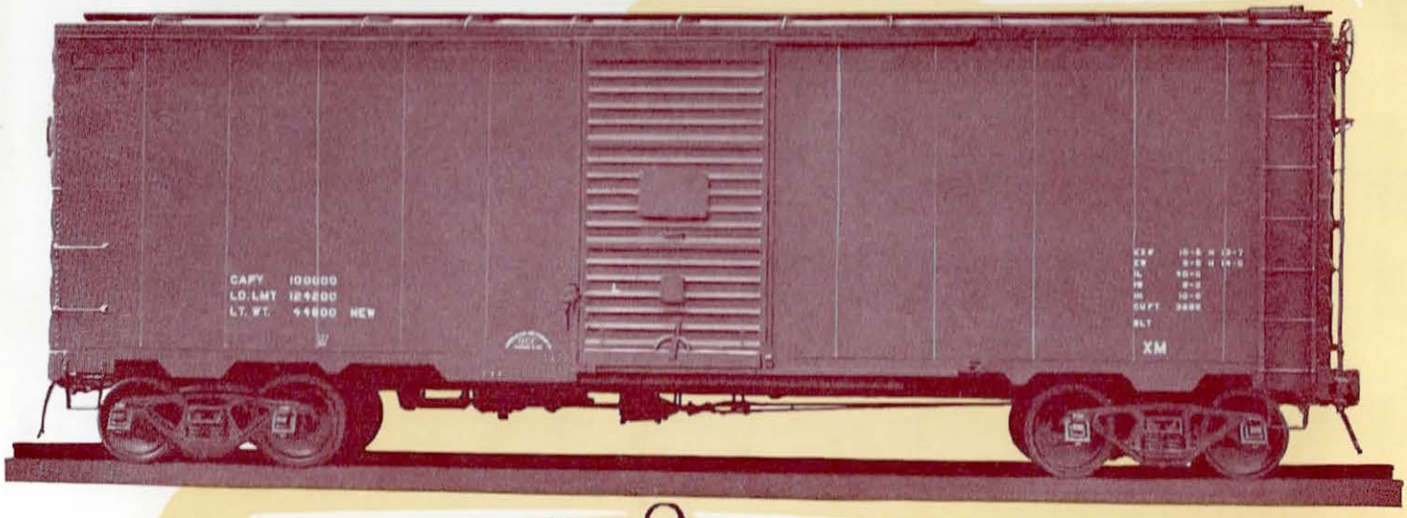
IN SALT WATER, Barrett Coal-tar Creosote guards effectively against marine borers. Coal-tar creosote is the ONLY wood preservative proved consistently effective against teredos, limnoria and other salt-water enemies of wood.

Barrett
Coal-Tar Creosote

Barrett*

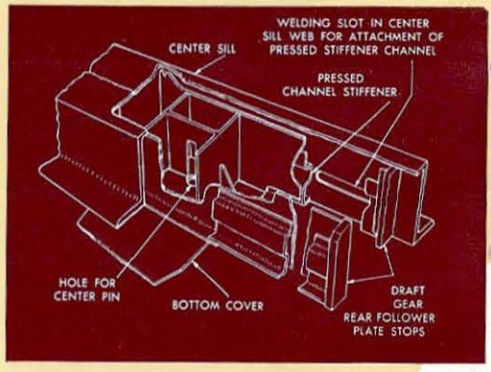
THE BARRETT DIVISION
ALLIED CHEMICAL & DYE CORPORATION
40 RECTOR STREET, NEW YORK 6, N. Y.

Reg. U. S. Pat. Off.



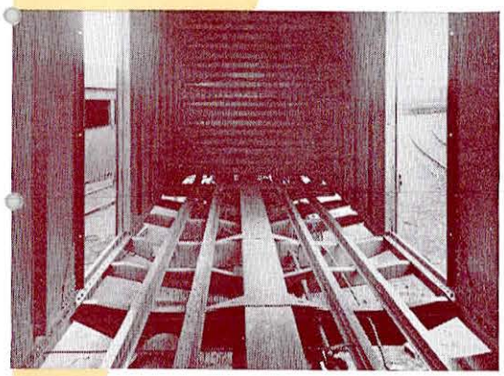
Interior of the standardized box car before lining is applied. Note the *extra* cross member at the door where most abuse occurs.

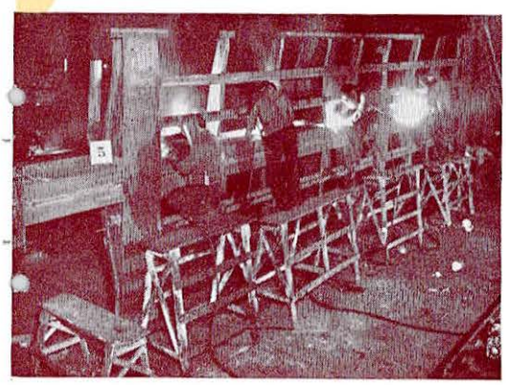
Note the unique design and construction of the A.C.F. combined bolster center filler and rear draft lug assembly of plates and shapes . . . jig clamped for precision-aligned welding.


WELDING SLOT IN CENTER SILL WEB FOR ATTACHMENT OF PRESSED STIFFENER CHANNEL
CENTER SILL
PRESSED CHANNEL STIFFENER
HOLE FOR CENTER PIN
BOTTOM COVER
DRAFT GEAR REAR FOLLOWER PLATE STOPS

In A.C.F. assembly-line production special machinery rotates the entire underframe to desired positions for "downhand" welding.

BALANCED OPERATING COSTS with a.c.f. standardized design FREIGHT CARS!





Keeping freight cars in good repair helps hold operating and maintenance costs down...to a point. Beyond that point ownership cost of old cars rises with alarming speed. That's when overhead can upset the balance of profitable operation. That's the time to BUY NEW!

Buying New Cars...a.c.f. car-building facilities can help Railroads reduce operating costs in two ways: First, they eliminate a Railroad's need for large investments in shops, tooling, and personnel beyond that required for normal maintenance operations. Second, a.c.f. Standardized Design freight cars are built for *many* Railroads, thus affording mass production facilities at lowest possible cost to individual roads.

Check carefully the advantages of better construction...faster delivery ...and greater efficiency offered by a.c.f. '*extra*-built'...standardized design freight cars. An a.c.f. Representative can show you how to cut overhead and operating costs with the *right kind* of new car equipment that meets *all* requirements. American Car and Foundry Company, New York • Chicago • St. Louis • Philadelphia • Washington • Cleveland San Francisco.

a.c.f.

CAR BUILDERS TO AMERICA'S RAILROADS

"Off Again--On Again"...

Fast work at each relay point helped a little. Every moment the rider could save made it easier for his relay string to keep up their Pony Express schedule. But profits for the contract rider lay in using only the best horses; those that could recover quickly and be fresh again for each run.

Otherwise, a corral full of extra mounts were needed. They ate up profits the way remachining of worn engine parts leads to higher Diesel operating costs.

That profit-destroying practice has been proved unnecessary. PORUS-KROME* and VANDERLOY M *renew* worn cylinder liners and crankshafts — make them recover with an actual gain in strength and endurance.

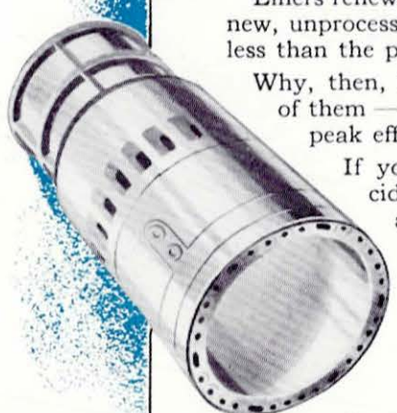
Liners renewed by Van der Horst have out-lasted as many as four new, unprocessed parts. Yet the cost of this long-lasting renewal is less than the price for *each* new, unprocessed replacement!

Why, then, keep a "corral full" of odd-sized Diesel parts? *All* of them — including those ready for scrap — can be restored to peak efficiency with PORUS-KROME and VANDERLOY M.

If you've been a little "on again, off again" about deciding to use Van der Horst processing, we invite you to ask us how the cumulative costs of remachining can be turned to dividends in your own Diesel operation.

* * *

**PORUS-KROME is a dense, hard, wear and corrosion-resistant chromium, produced by the Van der Horst Corporation of America, and which gives working surfaces an infinite number of tiny oil-retaining reservoirs for perfected lubrication.*



VAN DER HORST CORPORATION OF AMERICA
OLEAN, N. Y.

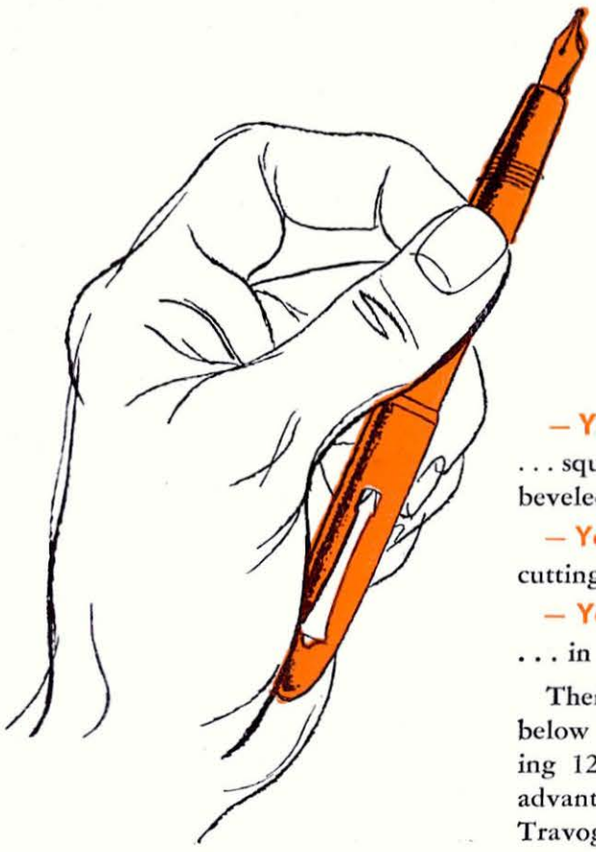
U. S. PATENTS 2,048,578, 2,314,604 and 2,412,698

DW-52E

PORUS - KROME

Good for the Life of your Engines

VAN DER HORST



if...

— **You** cut steel to irregular shapes of all kinds . . . circles . . . squares . . . rectangles . . . straight lines with square or beveled edges . . .

— **You** demand precision, production line steel shape-cutting . . .

— **You** work with steel plates, slabs, billets, or forgings . . . in metal up to 6-inches or more in thickness . . .

Then pick up your fountain pen and fill in the coupon below for all the information contained in the easy-reading 12-page booklet describing the many features and advantages of the production-proven new Airco No. 50 Travograph. Please mail the coupon to us today, or write us on your business letterhead.

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Gentlemen:

Tell me about the No. 50 Travograph today. Send me your catalog.

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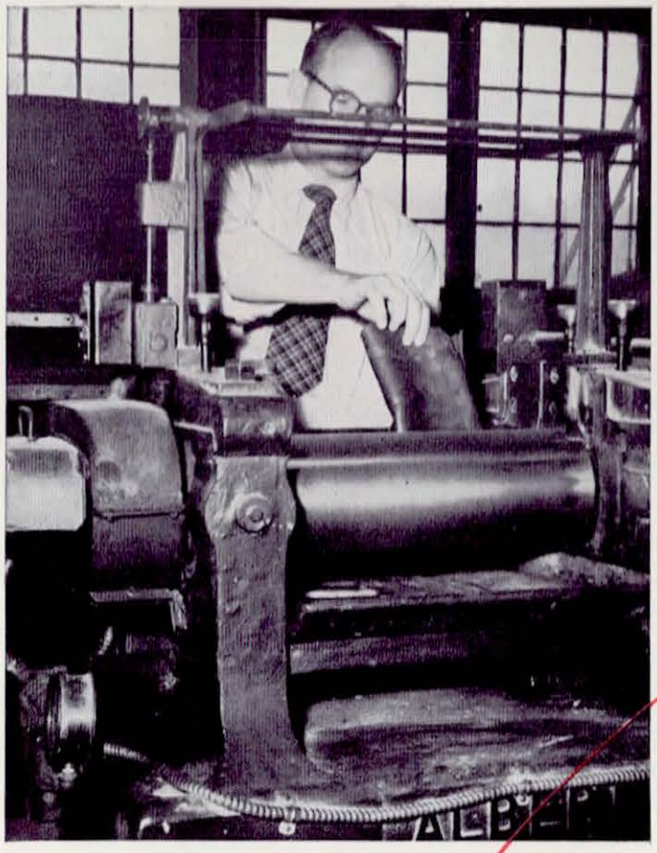
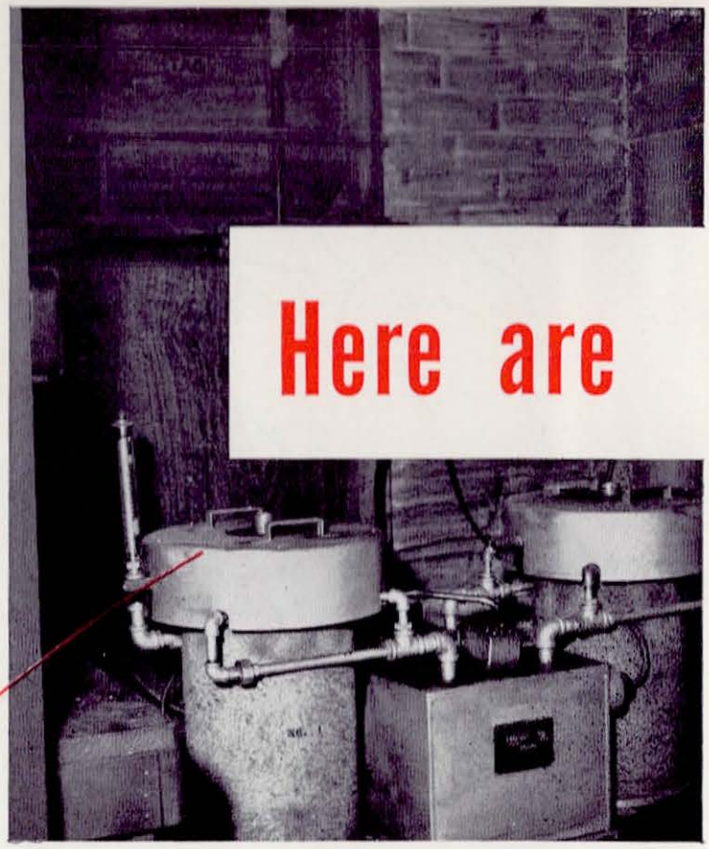
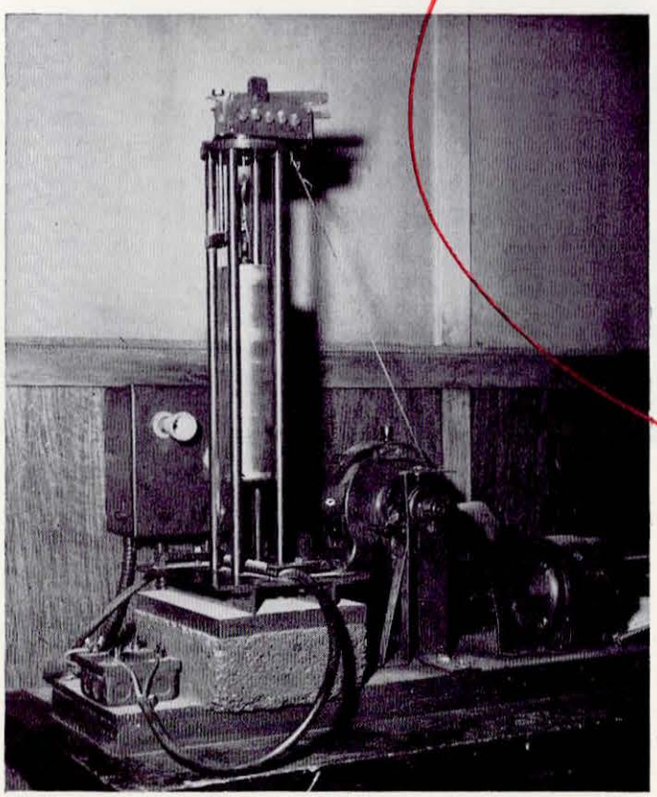


This rubber mill is installed for the exclusive use of our research department. Here, sample rubber compounds are milled under conditions that are identical with those encountered in actual production.

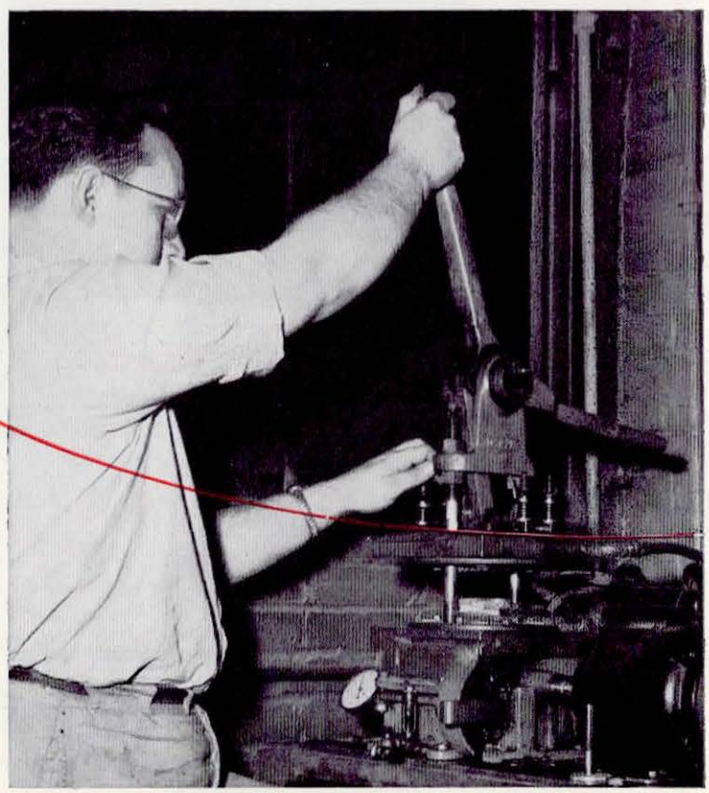


Here are

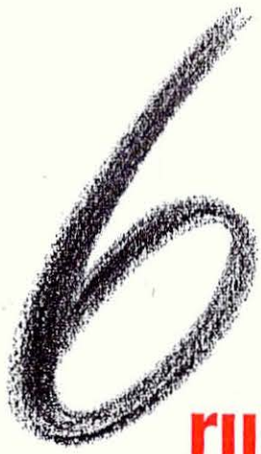
Here is the oxygen bomb—installed to provide accelerated aging test data. Results are available for all American Rubber Insulations that are tested in the oxygen bomb.



In this drop tester, the cable is operated under full load. The heavy steel weight is repeatedly dropped on the cable until it fails. At the top of the column is a counter that gives a numerical indication of how much such abuse the cable can withstand.



This Viscometer is one of the main tools for maintaining quality control *on the production line.* Rubber samples from every batch are carefully examined to make sure that they meet all specifications drawn up by the research department.



answers to your rubber insulation problems

AMERICAN STEEL & WIRE DIVISION
USS
AMERICAN ELECTRICAL WIRE AND CABLE
UNITED STATES STEEL

1. AMARINE-40	**UNDER GROUND OR UNDER WATER.** High voltage service for submarine power cables and for general use above 7500 volts.
2. AMERZONE	**OZONE-RESISTANT.** Plus resistance to heat and moisture.
3. AMARINE RWS	**HOT OR DAMP LOCATIONS.** Low water absorption, excellent heat resistance.
4. AMERITE	**GENERAL USE.** Performance grade compound. Use where copper temperature will not exceed 60°C.
5. AMPEROX	**HEAT-RESISTANT, GENERAL USE.** For copper temperatures up to 75°C., and voltages up to 7500.
6. AMERPRENE	**OIL, FLAME, SUNLIGHT AND AGE-RESISTANT.** Extra flexible jacket. High Neoprene content.

Close laboratory control assures you the best in material and design

There's an AMERICAN insulation for every need

No matter what your problem—high voltage, temperature, oil, moisture, ozone or sunlight—there's a standard American Insulation to solve it.

For complete test data on any of these compounds, call your American Steel & Wire Division District Engineer or write to American Steel & Wire Division, Rockefeller Building, Cleveland 13, Ohio.

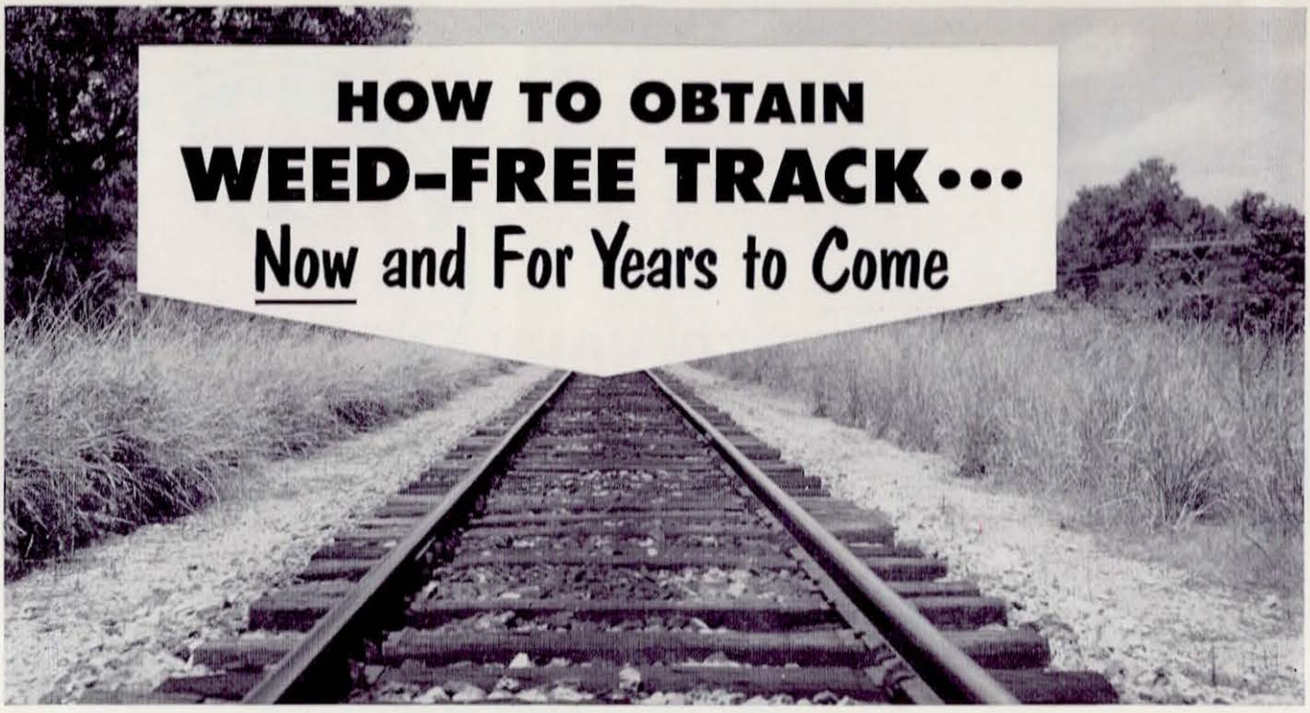
AMERICAN STEEL & WIRE DIVISION, UNITED STATES STEEL COMPANY
GENERAL OFFICES, CLEVELAND, OHIO

COLUMBIA-GENEVA STEEL DIVISION, SAN FRANCISCO, PACIFIC COAST DISTRIBUTORS · TENNESSEE COAL & IRON DIVISION, FAIRFIELD, ALA., SOUTHERN DISTRIBUTORS
UNITED STATES STEEL EXPORT COMPANY, NEW YORK

U·S·S American Electrical Wire and Cable

USS

UNITED STATES STEEL



GENERAL CHEMICAL "Custom Service"

gives You √ LONG-LASTING RESULTS √ LONG-RANGE ECONOMY!

No one herbicide can be a "cure-all" for the widely varying weed problems encountered by railroads from coast-to-coast.

That's why General Chemical has developed its "Custom Service" railroad weed control program...the only method that assures weed-free track immediately...with continuous reduction in re-growth coupled with long-range economy.

General's made-to-order method is patterned to fit the particular weed problems of *your* road. Treatment is carried on under the supervision of General Chemical's weed control specialists employing modern organic herbicides which thousands of miles of track treatment have proven most effective under specific vegetative and climatic conditions.

Aimed at control of perennial root systems, this scientific method kills off long established perennials, reduces the amount of re-growth year after year, eliminates heavy seed germination, and prevents outside encroachment in subgrade. With it, you can obtain weed-free track now and for years to come at diminishing annual costs!

GENERAL CHEMICAL WEED CONTROL

Weed Killer Department

GENERAL CHEMICAL DIVISION

ALLIED CHEMICAL & DYE CORPORATION

40 Rector Street, New York 6, N. Y.

General Chemical "Custom Service"
employs these proven weed and brush killers!

General Chemical Formula 7 (TCA, Acid in an Oil Base)	• For general purpose grass control. • Used with one of the additives listed for over-all control of weeds.
General Chemical Formula 7 with 2, 4-D	• For use where grasses predominate, but includes sufficient 2,4-D to control moderate infestations of broad-leafed weeds.
General Chemical Formula 7 B-D	• For control of very resistant weeds and grasses. The amount of 2, 4-D has been increased and fortified by pentachlorophenol.
General Chemical Sodium TCA (Liquid Concentrate)	• For soil treatment of noxious grasses. • For all-purpose weed control when used with one of the ester additives listed.
General Chemical Emulsible PCP—Aromatic Oil	• Low cost contact type killer for use where weed and grass control problems are not severe . . . contains Pentachlorophenol
General Chemical 2, 4-D Amine Additive	• Used in conjunction with General Chemical Formula 7 for all-purpose weed and grass control.
General Chemical 2, 4-D Ester Additive	• For use with General Chemical Formula 7 or Sodium TCA where cotton or other plants susceptible to 2, 4-D are not present.

General Chemical 2, 4-D—2, 4, 5-T Ester Brush Killer (Water Soluble)

STILL THE WORLD'S BEST TEST INSTRUMENT

• Of all the tests for endurance, capacity, unfailing service to which a draft gear may be subjected there is one test which is indisputable . . . THE TEST OF TIME.

• WAUGHMAT TWIN CUSHIONS have met that test . . . have proven in years and millions of miles of service that they provide unfailing protection to cars and lading.

• The test of time has proven the composition of the rubber, the design of the WAUGHMATS, their application thru steel plates, the way the WAUGHMATS work against steel, even the methods whereby the steel plates are protected against etching and corrosion.

• For certain performance specify WAUGHMAT TWIN CUSHIONS, the double action draft gear, on all new cars or for draft gear replacement on existing cars. TWIN CUSHIONS are the lowest cost big improvement you can make on any car.

MORE THAN 20 YEARS SERVICE EXPERIENCE ON AMERICAN RAILROADS

▶ The first rubber draft gear to receive A. A. R. approval

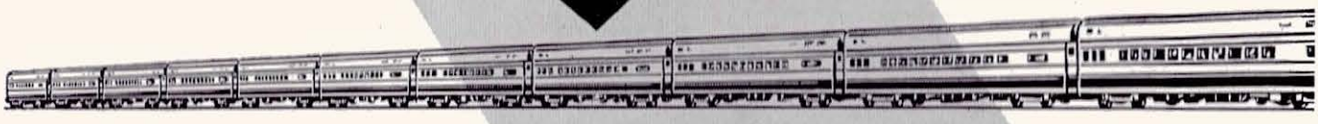
WAUGHMAT

Twin Cushions

TRADE MARK REGISTERED

WAUGH EQUIPMENT COMPANY, 420 Lexington Ave., New York 17, N Y • Chicago — St. Louis • Canadian Waugh Equipment Company, Montreal

ALL ALONG THIS LINE



there's minimum maintenance -- maximum dependability, with

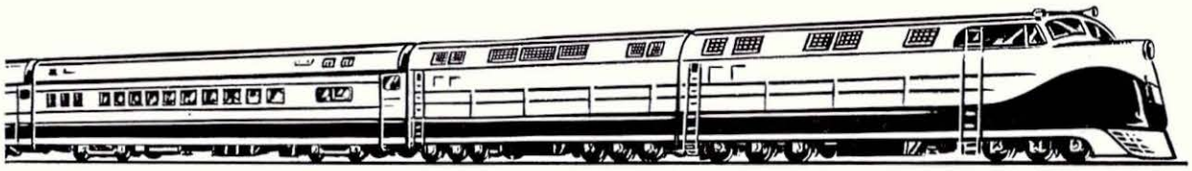
. . . FIRST for Minimum Maintenance

SKF Journal Bearings have proved, over a thirty-two year period, that they increase equipment availability and definitely lower equipment maintenance costs. And from experience, railroads have learned that SKF grease-lubricated journal boxes insure minimum maintenance.

. . . FIRST in Engineering Service

SKF responded to a need for expert bearing knowledge on the part of railroad maintenance men by conducting clinics for them—schools which teach them how to stretch maintenance dollars and minimize maintenance time by knowing more about bearings.

SKF Axle journal boxes have been applied throughout the world, to over 30,000 passenger cars, 52,800 freight cars. Over 11,300 steam, diesel and electric locomotives.



SKF ON THE JOB. Here's proof—you'll see the SKF trademark throughout the world, on more journal boxes in service than any other trademark.

Since 1921, when SKF built the *first* anti-friction railway journal bearings, railroads have depended on them for bigger payloads with less power, for faster, safer schedules.

Put SKF on the job in any type of railway equipment—steam, electric or diesel-electric locomotives, in electric, passenger or freight cars. Let SKF insure you minimum starting and running friction, easy maintenance, long, trouble-free service.

SKF SPHERICAL ROLLER BEARING JOURNALS

This well-known SKF design for locomotives and passenger cars uses two spherical roller bearings per journal. The bearings are self-contained, non-adjustable units, each capable of carrying both radial and thrust load.

SKF CYLINDRICAL ROLLER BEARING JOURNALS

In this SKF design, the radial load is carried by a multi-row cylindrical roller bearing, and all thrust loads are carried by a self-contained non-adjustable ball bearing attached to the end of the journal. The design provides pre-determined free lateral movement of the axle within the journal; the movement remains fixed, without adjustment, for the life of the application.

SKF INDUSTRIES, INC., PHILADELPHIA 32, PA.—*manufacturers of* SKF *and* HESS-BRIGHT *bearings.* 7344

Freight Operating Statistics of Large Railways — Selected

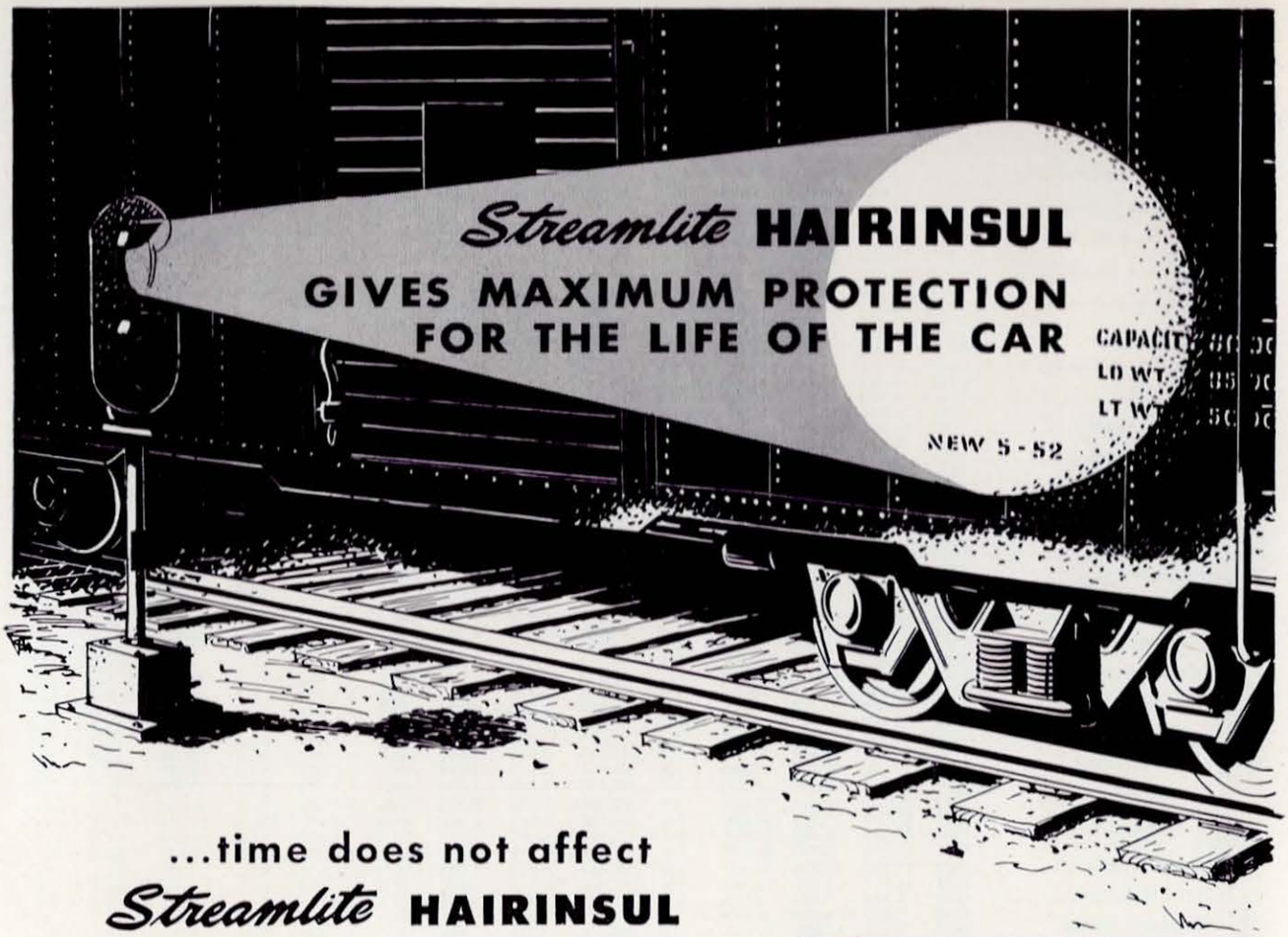
Region, Road and Year		Miles of road operated	Locomotive-Miles: Train-miles	Locomotive-Miles: Principal and helper	Locomotive-Miles: Light	Car-Miles: Loaded (thousands)	Car-Miles: Per cent loaded	Ton-miles (thousands): Gross excl. locos & tenders	Ton-miles (thousands): Net rev. and non-rev.	Road-locos. on line: Serviceable: Unstored	Road-locos. on line: Serviceable: Stored	Road-locos. on line: B.O.	Road-locos. on line: Per cent B.O.
New Eng. Region	Boston & Maine	1952	1,690	227,817	285,850	14,065	10,348	67.4	675,316	285,189	93	2	11	10.4
		1951	1,691	283,827	295,312	14,239	11,178	71.3	688,975	294,787	97	6	5	4.6
	N. Y., N. H. & Htfd	1952	1,765	303,062	303,310	22,696	11,506	69.5	709,238	300,951	94	..	6	6.0
		1951	1,766	314,881	315,838	21,938	12,321	70.3	772,199	341,243	100	..	14	12.3
Great Lakes Region	Delaware & Hudson	1952	793	255,538	293,540	21,622	10,927	69.1	779,357	421,380	94	19	34	23.1
		1951	793	276,817	322,410	24,891	12,084	71.8	853,383	469,069	165	25	27	12.4
	Del., Lack. & Western	1952	964	276,866	298,570	28,393	12,367	70.0	818,393	378,578	78	10	5	5.4
		1951	966	292,269	320,712	35,863	13,272	71.6	857,828	397,091	79	2	44	35.2
	Erie	1952	2,242	582,105	585,981	31,987	31,618	69.4	1,995,529	856,421	164	15	15	7.7
		1951	2,245	674,072	688,845	42,079	35,354	69.6	2,228,020	947,473	189	11	28	12.3
	Grand Trunk Western	1952	952	275,794	282,587	3,156	8,780	63.3	614,595	270,451	54	..	16	22.9
		1951	974	291,680	301,904	3,293	10,013	66.0	684,642	307,637	57	..	15	20.8
	Lehigh Valley	1952	1,207	240,324	243,488	10,744	11,616	71.1	759,501	361,090	39	5	5	10.2
		1951	1,216	252,948	267,442	25,461	12,624	72.1	823,783	396,948	54	2	9	13.8
	New York Central	1952	10,675	3,086,926	3,224,495	158,178	108,657	59.8	8,018,311	3,588,274	920	60	327	25.0
		1951	10,677	3,391,563	3,600,676	189,610	117,296	62.6	8,567,224	3,991,464	1,047	13	336	24.1
	New York, Chic. & St. L.	1952	2,161	807,788	821,556	11,432	30,134	64.9	2,116,515	947,569	213	9	34	13.3
		1951	2,162	890,527	912,667	14,063	32,655	66.2	2,268,817	1,020,825	220	1	31	12.3
	Pitts. & Lake Erie	1952	221	92,602	95,567	191	3,839	64.7	328,179	197,517	35	3	13	25.5
		1951	221	102,807	106,328	90	4,196	66.7	349,827	212,250	32	..	14	30.4
	Wabash	1952	2,381	512,324	519,141	7,552	21,798	69.9	1,398,228	611,324	118	19	30	18.0
		1951	2,381	587,654	598,780	10,650	23,811	69.9	1,512,563	656,746	142	1	77	35.0
Central Eastern Region	Baltimore & Ohio	1952	6,082	1,738,551	1,999,066	219,679	72,045	64.2	5,103,922	2,520,616	640	62	161	18.7
		1951	6,083	1,948,353	2,259,774	235,526	66,983	62.6	5,207,508	2,548,313	679	62	225	23.3
	Central of New Jersey	1952	411	72,691	72,979	3,251	2,968	67.4	203,521	103,785	33	1	3	8.1
		1951	410	79,713	79,857	4,008	2,979	65.6	220,379	116,648	42	..	8	16.0
	Central of Pennsylvania	1952	207	64,928	70,062	10,727	2,612	67.2	197,458	106,838	35	3	4	9.5
		1951	210	75,248	84,133	15,270	2,955	71.2	214,689	118,455	37	..	15	28.8
	Chicago & Eastern Ill.	1952	868	132,154	132,154	3,944	5,102	64.9	356,528	172,733	27	..	4	12.9
		1951	886	134,987	134,987	2,811	5,501	69.9	364,683	179,866	27	..	2	6.9
	Elgin, Joliet & Eastern	1952	236	95,978	97,309	230	3,420	62.8	277,859	150,329	43	..	1	2.3
		1951	238	99,497	102,316	653	3,880	67.4	302,303	167,287	41	..	1	2.4
	Pennsylvania System	1952	9,961	3,173,922	3,428,706	353,184	127,330	62.9	9,263,531	4,387,074	1,104	102	358	22.9
		1951	10,045	3,335,691	3,674,836	378,666	137,004	67.3	9,470,059	4,621,602	1,287	..	310	19.4
	Reading	1952	1,321	422,009	435,016	27,412	15,394	63.8	1,222,976	662,967	188	14	36	15.1
		1951	1,315	420,349	434,592	30,599	15,919	66.5	1,255,691	697,848	190	7	33	14.3
	Western Maryland	1952	836	211,954	253,823	32,347	7,440	60.8	631,865	351,350	130	..	19	12.8
		1951	837	208,485	253,276	30,418	7,740	63.5	636,266	354,896	153	15	17	9.2
Pocahontas Region	Chesapeake & Ohio	1952	5,037	1,504,991	1,584,759	67,135	66,765	56.0	5,917,753	3,310,614	520	5	180	25.5
		1951	5,042	1,557,592	1,635,886	64,181	63,871	58.2	5,382,246	2,972,274	534	4	240	30.8
	Norfolk & Western	1952	2,113	791,111	844,096	68,710	35,947	57.4	3,315,992	1,814,383	247	6	26	9.3
		1951	2,113	777,078	829,190	65,411	34,826	59.7	3,053,192	1,666,045	251	15	23	8.0
Southern Region	Atlantic Coast Line	1952	5,461	916,519	916,843	11,887	29,216	62.0	2,063,355	941,331	345	25	54	12.7
		1951	5,432	963,661	975,006	16,883	29,423	63.7	2,050,385	949,620	336	..	99	22.8
	Central of Georgia	1952	1,754	258,125	260,505	4,380	8,176	70.1	554,806	265,122	91	5	5	5.0
		1951	1,783	309,934	313,965	5,324	8,718	73.5	564,909	268,928	101	2	10	8.8
	Gulf, Mobile & Ohio	1952	2,830	328,405	328,405	158	16,676	71.9	1,089,229	524,766	82	..	4	4.7
		1951	2,851	346,100	346,100	340	17,496	74.4	1,116,714	540,868	82	..	1	1.2
	Illinois Central	1952	6,539	1,682,824	1,689,570	59,101	55,212	61.8	4,138,414	1,947,003	584	2	71	10.8
		1951	6,539	1,660,577	1,666,955	59,473	57,975	64.1	4,211,826	1,992,572	587	..	69	10.5
	Louisville & Nashville	1952	4,756	1,056,718	1,119,469	30,102	36,084	63.6	2,674,939	1,363,803	309	40	47	11.9
		1951	4,769	1,214,717	1,295,518	34,355	37,771	65.3	2,744,653	1,401,313	320	9	102	23.7
	Nash., Chatt. & St. Louis	1952	1,032	204,474	207,615	3,597	6,426	74.3	412,656	201,356	48	9	6	9.5
		1951	1,049	229,865	233,296	3,676	6,913	77.5	429,365	209,851	72	..	17	19.1
	Seaboard Air Line	1952	4,135	777,664	792,260	5,206	28,265	65.2	1,988,942	904,813	206	54	23	8.1
		1951	4,136	798,347	829,838	4,876	27,829	67.4	1,925,052	886,510	258	16	57	17.2
	Southern	1952	6,264	1,176,512	1,178,499	12,116	42,019	70.0	2,707,773	1,261,782	339	44	96	20.0
		1951	6,302	1,293,024	1,303,217	17,074	45,153	71.8	2,803,799	1,286,896	398	9	176	30.2
Northwestern Region	Chicago & North Western	1952	7,889	866,119	883,940	21,737	30,125	64.3	2,156,934	948,938	295	10	136	30.8
		1951	7,920	917,403	935,605	26,877	32,527	69.6	2,229,003	975,810	305	7	129	29.3
	Chicago Great Western	1952	1,441	148,449	148,567	7,952	7,655	69.1	514,991	236,364	32	..	2	5.9
		1951	1,441	154,631	154,631	9,730	9,037	73.4	575,252	264,026	35	..	..	..
	Chic., Milw., St. P. & Pac.	1952	10,663	1,199,257	1,231,482	43,263	43,821	63.3	3,041,394	1,362,813	395	54	83	15.6
		1951	10,663	1,286,648	1,332,185	48,258	48,442	69.0	3,204,939	1,493,579	438	66	71	12.3
	Chic., St. P., Minn. & Omaha	1952	1,606	218,702	225,325	10,968	5,845	64.3	425,362	193,889	55	..	45	45.0
		1951	1,606	226,255	237,526	13,369	6,021	71.7	407,202	194,186	73	..	25	25.5
	Duluth, Missabe & Iron Range	1952	567	44,690	45,326	884	762	53.9	56,887	26,327	35	10	28	38.4
		1951	564	66,863	67,868	1,050	1,339	56.7	120,028	67,638	26	19	16	26.2
	Great Northern	1952	8,181	1,015,196	1,015,798	43,469	33,666	71.0	2,274,888	1,078,885	325	119	63	12.4
		1951	8,220	1,059,235	1,058,055	49,104	36,864	74.6	2,478,548	1,186,020	355	83	68	13.4
	Minneap., St. P. & S. Ste. M.	1952	4,173	393,172	368,662	3,270	11,978	66.3	806,176	382,209	109	..	11	9.2
		1951	4,179	408,507	414,434	5,411	12,507	70.1	827,891	408,355	106	..	15	12.4
	Northern Pacific	1952	6,591	810,491	838,092	38,763	29,368	71.1	2,028,362	965,920	333	16	63	15.3
		1951	6,591	805,063	846,216	44,565	30,554	76.8	2,054,665	967,556	325	18	69	16.7
Central Western Region	Atch., Top. & S. Fe (incl. G. C. & S. F. and P. & S. F.)	1952	13,074	2,531,087	2,637,133	105,675	106,358	66.6	7,128,116	2,920,998	585	51	156	19.7
		1951	13,096	2,591,685	2,719,585	97,766	107,897	68.5	6,992,033	2,833,721	659	34	175	20.2
	Chic., Burl. & Quincy	1952	8,800	1,176,939	1,182,230	48,082	47,776	64.8	3,342,041	1,533,368	367	40	105	20.5
		1951	8,788	1,300,321	1,319,960	46,356	54,079	66.6	3,739,391	1,744,946	402	28	115	21.1
	Chic., Rock I. & Pac.	1952	7,902	1,085,365	1,103,842	24,684	37,956	60.6	2,775,311	1,159,609	241	2	48	16.5
		1951	7,903	1,143,373	1,163,726	20,203	51,162	70.1	2,922,521	1,305,807	250	9	71	21.5
	Denver & R. G. Wn.	1952	2,333	307,651	337,888	46,564	12,813	71.3	885,841	417,192	109	10	34	22.2
		1951	2,387	337,902	373,355	45,491	13,679	69.2	933,457	461,263	113	30	29	16.9
	Southern Pacific	1952	8,081	1,862,015	1,956,931	235,114	82,293	69.8	5,439,315	2,384,903	617	32	168	20.6
		1951	8,054	2,040,654	2,151,072	293,886	91,317	70.0	5,916,400	2,536,764	740	5	158	17.5
	Union Pacific	1952	9,867	2,315,088	2,416,853	177,738	92,753	67.7	6,290,280	2,888,535	596	49	159	19.8
		1951	9,720	2,394,917	2,501,333	183,565	100,098	70.0	6,632,719	2,983,255	609	62	127	15.9
	Western Pacific	1952	1,190	195,679	199,425	17,120	8,509	75.2	541,078	259,570	46	9	15	21.4
		1951	1,190	225,971	234,018	25,277	11,039	76.3	689,451	320,218	51	14	27	29.3
Southwestern Region	International-Gt. Northern*	1952	1,104	194,499	194,580	190	6,829	64.1	504,998	227,589	48	1	12	19.7
		1951	1,104	209,594	210,960	665	7,234	65.7	506,195	222,819	55	1	5	8.2
	Kansas City Southern	1952	886	190,119	190,323	444	9,523	68.2	671,129	323,426	24	4	11	28.2
		1951	886	182,821	185,219	1,219	9,595	68.2	644,043	295,170	34	6	21	34.4
	Mo.-Kans.-Texas Lines	1952	3,230	433,524	434,778	5,810	15,760	64.4	1,051,963	439,951	91	17	4	3.6
		1951	3,231	439,985	443,144	6,333	16,500	66.3	1,051,872	458,241	95	6	29	22.3
	Missouri Pacific*	1952	6,933	1,265,067	1,283,282	16,795	47,538	65.1	3,282,367	1,452,070	329	9	49	12.7
		1951	6,942	1,399,463	1,425,956	23,176	50,290	66.6	3,392,698	1,513,107	364	..	47	11.4
	Texas & Pacific	1952	1,832	362,408	362,408	11,066	14,392	61.9	1,029,020	393,677	63	12	49	39.5
		1951	1,844	386,904	386,904	20,067	14,800	61.9	1,032,992	385,921	82	1	2	2.4
	St. Louis-San Francisco	1952	4,567	662,803	666,938	6,495	24,277	65.2	1,656,093	741,794	168	72	94	28.1
		1951	4,604	725,874	737,482	7,955	25,248	68.0	1,641,109	732,070	198	62	89	25.5
	St. Louis Southw. Lines	1952	1,562	352,378	356,193	4,833	15,717	70.2	990,261	442,661	63	27	19	17.4
		1951	1,562	388,982	390,546	5,428	16,751	73.5	992,302	443,573	75	8	18	17.8
	Texas & New Orleans	1952	4,290	734,383	734,499	22,703	28,588	68.4	1,945,234	866,377	222	..	51	18.7
		1951	4,315	827,281	827,629	27,550	29,819	70.4	1,958,708	857,771	217	..	56	20.5

Items for the Month of January 1952 Compared with January 1951

Region	Road	Year	Freight cars on line: Home	Foreign	Total	Per Cent B.O.	G.t.m.per train-hr. excl.locos and tenders	G.t.m.per train-mi. excl.locos and tenders	Net ton-mi. per train-mile	Net ton-mi. per l'd car-mile	Net ton-mi. per car-day	Car-miles per car-day	Net daily ton-mi. per road-mi.	Train-miles per train-hour	Miles per loco. per day
New Eng. Region	Boston & Maine	1952	1,230	8,852	10,082	1.9	39,478	2,435	1,028	27.6	928	4..9	5,444	16.2	101.6
		1951	1,294	10,016	11,310	2.8	37,620	2,432	1,040	26.4	875	46.5	5,623	15.5	103.2
	N. Y., N. H. & Htfd	1952	1,420	13,069	14,489	3.8	36,286	2,343	994	26.2	683	37.6	5,500	15.5	122.6
		1951	1,476	19,196	20,672	1.2	35,855	2,455	1,085	27.7	541	27.8	6,233	14.6	111.1
Great Lakes Region	Delaware & Hudson	1952	3,975	5,613	9,588	5.7	57,092	3,065	1,657	38.6	1,452	54.5	17,141	18.7	71.7
		1951	1,960	6,653	8,613	4.6	57,041	3,095	1,701	38.8	1,768	63.5	19,081	18.5	53.8
	Del., Lack. & Western	1952	5,171	10,426	15,597	5.4	47,686	3,000	1,388	30.6	777	36.3	12,668	16.1	126.0
		1951	4,269	11,707	15,976	8.5	45,151	2,984	1,381	29.9	791	36.9	13,260	15.4	100.0
	Erie	1952	6,831	20,993	27,824	4.5	58,620	3,455	1,483	27.1	1,009	53.7	12,322	17.1	114.9
		1951	6,195	22,169	28,364	4.0	56,230	3,331	1,416	26.8	1,047	56.1	13,614	17.0	113.7
	Grand Trunk Western	1952	3,760	9,102	12,862	3.8	45,736	2,248	989	30.8	677	34.7	9,164	20.5	144.4
		1951	3,433	11,510	14,943	4.5	46,394	2,388	1,073	30.7	659	32.5	10,189	19.8	146.0
	Lehigh Valley	1952	1,949	13,263	15,212	7.0	63,856	3,186	1,515	31.1	774	35,0	,,650	20.2	180.8
		1951	3,880	12,674	16,554	5.9	62,947	3,291	1,586	31.4	783	34.5	10,530	19.3	152.6
	New York Central	1952	61,428	104,980	166,408	5.9	42,494	2,641	1,182	33.0	701	35.5	10,843	16.4	93.1
		1951	50,846	143,086	193,932	3.8	39,277	2,568	1,196	34.0	680	31.9	12,059	15.5	97.7
	New York, Chic. & St. L.	1952	6,510	18,482	24,992	4.8	46,508	2,657	1,189	31.4	1,214	59.5	14,145	17.8	112.9
		1951	3,950	24,005	27,955	3.4	43,108	2,600	1,170	31.3	1,201	58.0	15,231	16.9	128.6
	Pitts. & Lake Erie	1952	3,232	10,214	13,446	6.2	51,382	3,571	2,149	51.5	513	15.4	28,830	14.5	66.0
		1951	3,928	14,016	17,944	8.4	45,705	3,409	2,069	50.6	395	11.7	30,981	13.4	85.8
	Wabash	1952	7,087	14,168	21,255	4.9	58,552	2,750	1,202	28.0	933	47.6	8,282	21.5	110.2
		1951	5,648	14,549	20,197	2.3	52,646	2,607	1,132	27.6	1,066	55.3	8,898	20.5	94.4
Central Eastern Region	Baltimore & Ohio	1952	45,434	50,725	96,159	5.4	41,523	2,975	1,469	35.0	843	37.5	13,369	14.1	87.3
		1951	38,426	57,702	96,128	6.2	36,240	2,707	1,325	38.0	873	36.7	13,514	13.6	86.2
	Central of New Jersey	1952	365	9,006	9,371	3.2	37,289	2,923	1,491	35.0	348	14.8	8,146	13.3	96.2
		1951	337	9,920	10,257	2.3	38,394	2,872	1,520	39.2	374	14.6	9,178	13.9	88.9
	Central of Pennsylvania	1952	1,620	3,720	5,340	17.5	41,977	3,232	1,749	40.9	671	24.4	16,649	13.8	78.1
		1951	916	3,646	4,562	15.0	41,832	3,046	1,680	40.1	863	30.2	18,196	14.7	75.3
	Chicago & Eastern Ill.	1952	1,689	3,833	5,522	5.0	45,337	2,707	1,311	33.9	1,036	47.1	6,419	16.8	157.8
		1951	1,618	5,360	6,978	6.9	43,764	2,717	1,340	32.7	912	39.9	6,549	16.2	170.0
	Elgin, Joliet & Eastern	1952	6,296	18,396	24,692	2.1	15,278	2,989	1,617	44.0	207	7.5	20,548	5.3	110.5
		1951	6,246	12,215	18,461	1.9	18,448	3,166	1,752	43.1	270	9.3	22,674	6.1	127.2
	Pennsylvania System	1952	94,392	119,284	213,676	8.4	46,586	3,005	1,423	34.5	656	30.3	14,207	16.0	84.8
		1951	87,090	125,930	213,020	10.6	40,622	2,935	1,432	33.7	692	30.5	14,842	14.3	90.7
	Reading	1952	11,982	21,465	33,447	3.4	37,473	2,899	1,571	43.1	616	22.4	16,189	12.9	72.3
		1951	10,201	23,858	34,059	3.5	38,245	2,989	1,661	43.8	707	24.3	17,119	12.8	80.1
	Western Maryland	1952	5,277	3,723	9,000	1.8	40,961	3,034	1,687	47.2	1,234	43.0	13,557	13.7	65.7
		1951	4,311	4,928	9,239	1.7	41,270	3,108	1,734	45.9	1,279	43.9	13,678	13.5	53.5
Pocahontas Region	Chesapeake & Ohio	1952	50,761	22,073	72,834	4.9	67,283	3,976	2,224	49.6	1,476	53.2	21,202	17.1	80.6
		1951	42,846	25,240	68,086	5.6	56,343	3,514	1,940	46.5	1,415	52.2	19,016	16.3	76.8
	Norfolk & Western	1952	35,385	8,285	43,670	2.2	66,951	4,287	2,346	50.5	1,368	47.2	27,699	16.0	113.0
		1951	27,755	8,881	36,636	2.8	64,926	3,994	2,179	47.8	1,509	52.9	25,435	16.5	107.7
Southern Region	Atlantic Coast Line	1952	13,755	19,836	33,591	2.8	36,543	2,264	1,033	32.2	910	45.6	5,560	16.2	78.5
		1951	11,407	24,650	36,057	2.4	31,896	2,143	992	32.3	890	43.3	5,639	15.0	81.1
	Central of Georgia	1952	2,468	6,486	8,954	4.5	37,601	2,160	1,032	32.4	1,013	44.6	4,876	17.5	89.5
		1951	1,676	6,363	8,039	3.4	31,837	1,830	871	30.8	1,061	46.8	4,865	17.5	99.2
	Gulf, Mobile & Ohio	1952	3,475	11,687	15,162	3.6	63,490	3,331	1,605	31.5	1,134	50.1	5,982	19.1	132.0
		1951	2,741	13,427	16,168	1.6	62,002	3,239	1,569	30.9	1,110	48.2	6,120	19.2	143.9
	Illinois Central	1952	24,039	34,507	58,546	1.7	39,507	2,510	1,181	35.3	1,097	50.3	9,605	16.1	92.0
		1951	18,657	35,588	54,245	2.2	42,237	2,575	1,218	34.4	1,180	53.5	9,830	16.7	90.5
	Louisville & Nashville	1952	27,414	15,464	42,878	7.3	39,238	2,536	1,293	37.8	1,027	42.7	9,250	15.5	102.5
		1951	28,569	17,706	46,275	7.9	34,827	2,267	1,157	37.1	987	40.7	9,479	15.4	105.9
	Nash., Chatt. & St. Louis	1952	1,198	5,231	6,429	3.1	40,247	2,024	987	31.3	1,077	46.3	6,294	19.9	131.0
		1951	1,231	4,724	5,955	2.3	38,529	1,875	916	30.4	1,178	50.1	6,453	20.6	92.3
	Seaboard Air Line	1952	10,578	18,082	28,660	1.9	45,428	2,611	1,188	32.0	1,039	49.8	7,059	17.8	106.3
		1951	8,280	18,999	27,279	1.6	42,110	2,470	1,137	31.9	1,048	48.8	6,914	17.5	96.2
	Southern	1952	14,129	29,460	43,589	4.1	39,286	2,318	1,080	30.0	940	44.7	6,498	17.1	87.3
		1951	12,596	28,690	41,286	3.1	35,448	2,188	1,004	28.5	997	48.7	6,587	16.3	80.1
Northwestern Region	Chicago & North Western	1952	17,966	34,981	52,947	3.8	39,070	2,615	1,150	31.5	594	29.3	3,880	15.7	73.0
		1951	15,562	35,743	51,305	4.1	37,951	2,556	1,119	30.0	623	29.8	3,974	15.6	78.9
	Chicago Great Western	1952	1,869	5,633	7,502	2.8	61,148	3,484	1,599	30.9	1,019	47.7	5,291	17.6	154.9
		1951	1,048	6,568	7,616	2.4	61,145	3,744	1,719	29.2	1,138	53.1	5,910	16.4	159.5
	Chic., Milw., St. P. & Pac.	1952	29,988	36,005	65,993	4.0	40,780	2,553	1,144	31.1	660	33.5	4,123	16.1	84.2
		1951	23,074	47,827	70,901	2.0	40,027	2,508	1,169	30.8	709	33.4	4,518	16.1	82.9
	Chic., St. P., Minn. & Omaha	1952	1,152	9,447	10,599	3.4	29,576	2,033	927	33.2	619	29.0	3,894	15.2	80.3
		1951	1,059	8,125	9,184	3.4	25,069	1,921	916	32.3	674	29.1	3,900	13.9	90.4
	Duluth, Missabe & Iron Range	1952	11,594	1,246	12,840	3.2	19,349	1,348	624	34.5	65	3.5	1,498	15.2	24.5
		1951	8,894	803	9,697	4.3	27,771	2,039	1,149	50.5	180	6.3	3,869	15.5	44.6
	Great Northern	1952	21,541	18,360	39,901	4.2	36,916	2,260	1,072	32.0	850	37.4	4,254	16.5	72.7
		1951	17,876	16,817	34,693	3.4	39,263	2,357	1,128	30.5	1,065	46.8	4,654	16.8	75.5
	Minneap., St. P. & S. Ste. M.	1952	6,002	10,341	16,343	5.2	38,566	2,060	976	31.9	818	38.6	2,955	18.8	118.2
		1951	4,814	9,166	13,980	6.2	36,710	2,060	1,016	32.7	942	41.1	3,152	18.1	120.1
	Northern Pacific	1952	17,563	17,102	34,615	5.7	42,322	2,537	1,208	32.9	899	38.4	4,727	16.9	75.2
		1951	15,115	14,497	29,612	5.8	43,300	2,580	1,215	31.7	1,049	43.2	4,735	17.0	76.5
Central Western Region	Atch., Top. & S. Fe (incl. G. C. & S. F. and P. & S. F.)	1952	47,921	31,281	79,202	4.7	60,537	2,828	1,159	27.5	1,164	63.6	7,207	21.5	118.8
		1951	38,394	31,104	69,498	4.1	56,377	2,711	1,099	26.3	1,247	69.2	6,980	20.9	111.7
	Chic., Burl. & Quincy	1952	17,218	24,294	41,512	3.5	54,942	2,850	1,308	32.1	1,189	57.2	5,621	19.3	81.8
		1951	14,958	30,305	45,263	3.7	53,229	2,894	1,350	32.3	1,270	59.1	6,405	18.5	84.7
	Chic., Rock I. & Pac.	1952	10,288	25,025	35,313	3.4	46,802	2,564	1,071	30.6	1,035	55.9	4,734	18.3	130.2
		1951	8,394	25,398	33,792	2.3	47,440	2,566	1,146	25.5	1,254	70.1	5,330	18.6	121.8
	Denver & R. G. Wn.	1952	7,303	6,606	13,909	3.5	45,773	2,897	1,364	32.6	975	42.0	5,768	15.9	85.7
		1951	7,661	7,570	15,231	3.2	45,446	2,793	1,380	33.7	1,050	45.0	6,234	16.5	84.4
	Southern Pacific	1952	27,441	45,820	73,261	2.7	48,469	2,967	1,301	29.0	1,059	52.4	9,520	16.6	92.8
		1951	24,777	41,244	66,021	3.1	48,964	2,938	1,260	27.8	1,219	62.7	10,160	16.9	93.4
	Union Pacific	1952	27,261	32,144	59,405	2.1	59,784	2,765	1,270	31.1	1,558	73.9	9,443	22.0	107.7
		1951	24,353	35,188	59,541	2.4	60,342	2,803	1,261	29.8	1,627	78.0	9,901	21.8	112.5
	Western Pacific	1952	2,454	3,508	5,962	4.0	59,900	2,837	1,361	30.5	1,189	51.8	7,036	21.7	101.4
		1951	1,583	3,151	4,734	9.1	69,438	3,062	1,422	29.0	2,144	96.9	8,680	22.8	91.4
Southwestern Region	International-Gt. Northern*	1952	884	6,850	7,734	2.3	52,697	2,612	1,177	33.3	958	44.9	6,650	20.3	104.6
		1951	762	6,822	7,584	1.4	45,730	2,439	1,074	30.8	936	46.2	6,511	18.9	112.8
	Kansas City Southern	1952	1,090	6,201	7,291	3.6	70,268	3,582	1,726	34.0	1,431	61.7	11,766	15.9	172.0
		1951	1,011	6,278	7,289	2.7	69,883	3,566	1,634	30.8	1,328	63.3	10,747	19.8	110.9
	Mo.-Kans.-Texas Lines	1952	3,695	6,507	10,202	6.6	50,663	2,435	1,018	27.9	1,381	76.8	4,394	20.9	131.3
		1951	2,582	7,407	9,989	3.8	46,036	2,403	1,047	27.8	1,484	80.6	4,575	19.3	118.2
	Missouri Pacific*	1952	16,612	18,834	35,446	2.6	55,526	2,612	1,155	30.5	1,385	69.6	6,756	21.4	114.7
		1951	15,514	20,712	36,226	2.6	48,492	2,443	1,089	30.1	1,355	67.6	7,031	20.0	121.0
	Texas & Pacific	1952	2,220	7,663	9,883	4.7	64,153	2,841	1,087	27.4	1,320	78.0	6,932	22.6	100.5
		1951	2,099	7,495	9,594	7.0	55,672	2,677	1,000	26.1	1,298	80.5	6,751	20.9	155.9
	St. Louis-San Francisco	1952	9,775	13,817	23,592	2.6	46,467	2,512	1,125	30.6	1,067	53.5	5,240	18.6	73.6
		1951	6,112	14,068	20,180	3.0	39,928	2,269	1,012	29.0	1,178	59.8	5,129	17.7	75.3
	St. Louis Southw. Lines	1952	1,779	5,193	6,972	1.9	59,954	2,811	1,257	28.2	2,155	109.0	9,142	21.3	112.3
		1951	1,376	5,724	7,100	2.1	50,548	2,554	1,142	26.5	2,072	106.5	9,161	19.8	132.8
	Texas & New Orleans	1952	4,607	17,116	21,723	3.0	49,168	2,671	1,189	30.3	1,291	62.3	6,515	18.6	95.0
		1951	3,082	19,520	22,602	2.8	44,552	2,393	1,048	28.8	1,271	62.8	6,413	18.8	106.7

*Report of trustee or trustees.

Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.



...time does not affect Streamlite HAIRINSUL

The installation of Streamlite HAIRINSUL into new refrigerator cars is a one time investment. *Streamlite HAIRINSUL actually outlasts the life of the car!*

It can be re-used without need for further processing. Records show where all-hair insulation, removed from refrigerator cars after 20 years or more of service, is in "like-new" condition. Its high insulating efficiency remains the same year in and year out.

In addition, Streamlite HAIRINSUL assures you all the advantages at the right—and more, too. Write for complete data.

LOW CONDUCTIVITY. Thoroughly washed and sterilized, all-hair heat barrier. Rated conductivity — .25 btu per square foot, per hour, per degree F., per inch thick.

LIGHT WEIGHT. Advanced processing methods reduce weight of STREAMLITE HAIRINSUL by 40%.

PERMANENT. Does not disintegrate when wet, resists absorption. Will not shake down, is fire-resistant and odorless.

EASY TO INSTALL. Blankets may be applied to car wall in one piece, from sill to plate and from one side door to the other. Self-supporting in wall sections between fasteners.

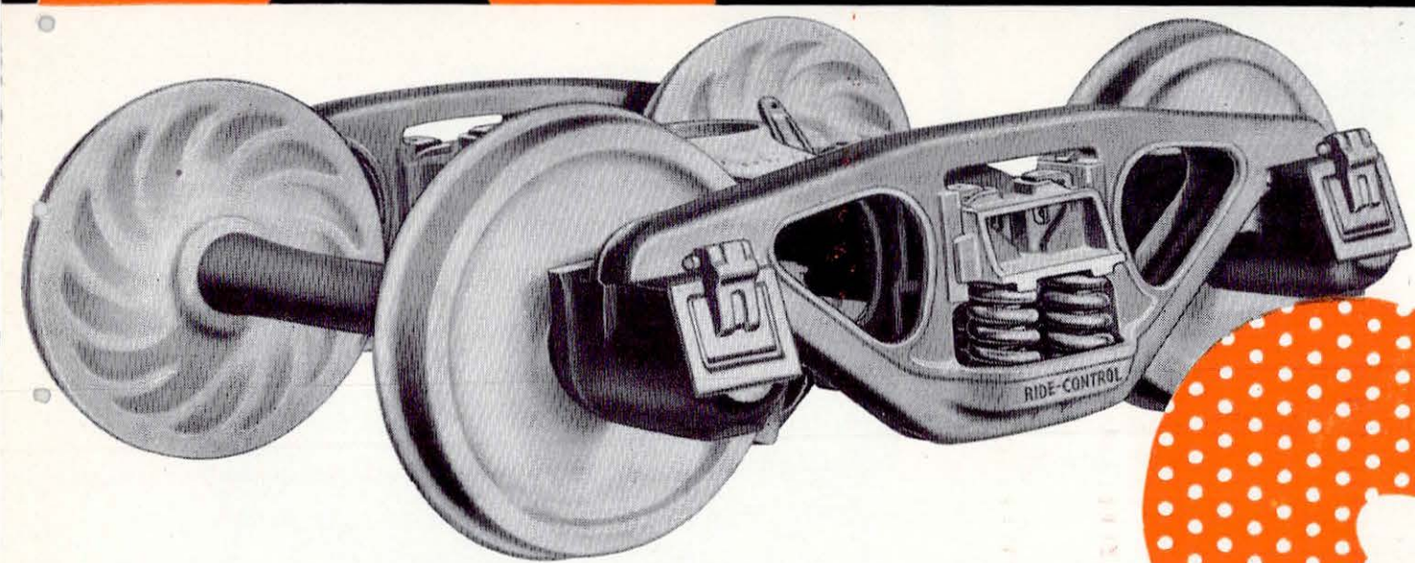
COMPLETE RANGE. STREAMLITE HAIRINSUL is available ½" to 4" thick, up to 127" wide. Stitched on 5" or 10" centers between two layers of reinforced asphalt laminated paper. Other weights and facings are available.

HIGH SALVAGE VALUE. The all-hair content does not deteriorate with age; therefore has high salvage value. No other type of insulation offers a comparable saving.

Sets The Standard By Which All Other Refrigerator Car Insulations Are Judged

Dept. H-24, Merchandise Mart, Chicago 54, Ill.

A DESIGNED...DEVELOPED and PROVED by American Steel Foundries



With pardonable pride we remind railroaders that ASF was responsible for the development of the Ride-Control freight car truck. Its achievements in the field have been very gratifying during these last eight years.

Today, almost 300,000 car sets of ASF Ride-Control Trucks are in operation. These trucks are delivering smoother, load-protecting, road-protecting rides in a wide variety of regular and high-speed freight train and box-express services. What are the reasons for such acceptance?

The Ride-Control Truck brought to railroading two great, necessary improvements: 1) It allowed the use of long-travel springs that give soft, impact-absorbing protection to lading. Even when a car is carrying its maximum permissible rail load, there is enough *reserve* spring travel to meet the needs of modern high-speed operation. 2) It provided proper and *constant* spring-action control to prevent harmful oscillation.

Engineeringwise, greatest of all accomplishments is the *utter simplicity* of the four little friction shoes which provide that control!

If you would like to know just how the Ride-Control Truck functions, please write for our booklet, "Quick Facts II." It's yours for the asking!

AMERICAN STEEL FOUNDRIES

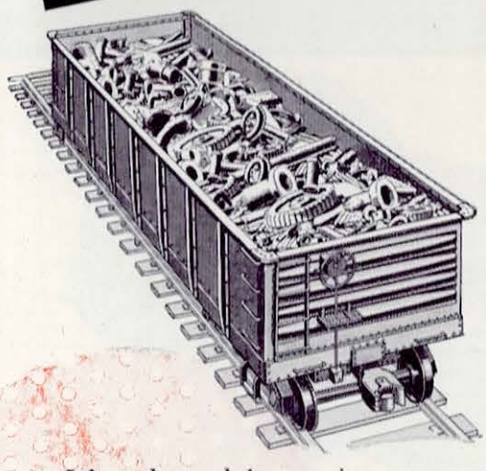
410 N. Michigan Avenue, Chicago 11, Illinois

Mint Mark of ○ *Fine Products*

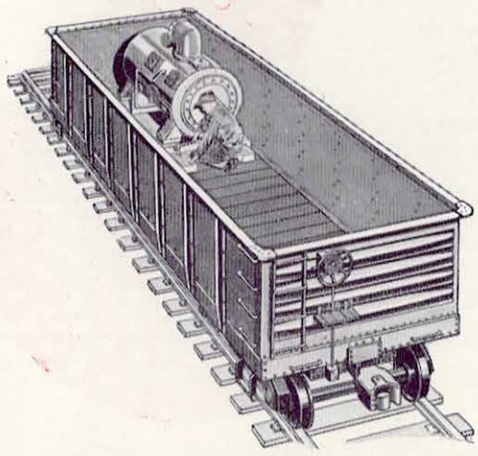
Canadian Sales: International Equipment Co., Ltd., Montreal 1, Quebec

F Ride-Control Trucks

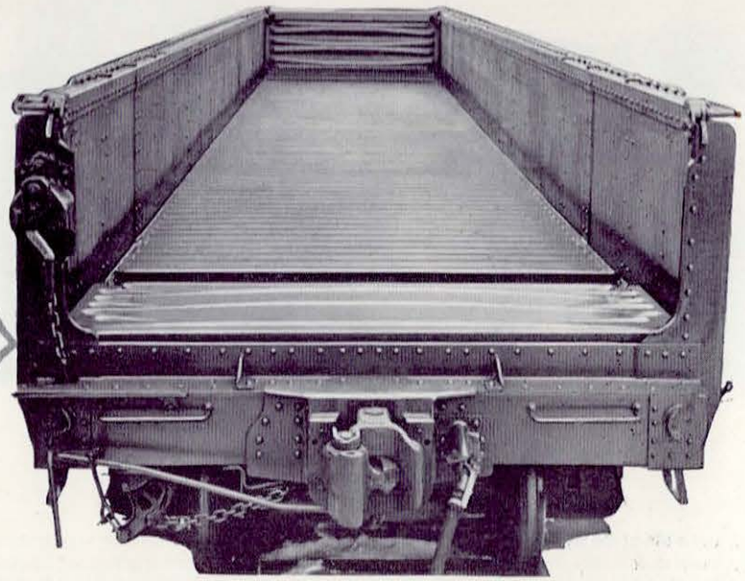
WHY USE TWO ... WHEN ONE WILL DO?



Inbound gondola carrying scrap may have a steel plate floor to which outbound finished freight cannot be blocked.



Result: a *second* car with a different type flooring, to which finished freight *can* be blocked, is often needed.



"GONDOLAS: Shortages are being reported by all principal railroads . . ."
—Bulletin No. 80, 1-21-52
AAR Car Service Division

Gondolas equipped with NAILABLE STEEL FLOORING do double duty. Floored with steel, yet nailable . . . they can deliver rough freight and carry away finished freight which must be blocked. And, of course, the reverse is equally true. Cars equipped with N-S-F thus make possible less switching and deadheading of empties which, in turn, reduce operating costs—improve car supply.

Formed of tough N-A-X HIGH-TENSILE steel, N-S-F takes nails easily without damage to the floor . . . provides security for blocked and skidded loads . . . assures extra revenue years of service.

N-S-F HOLDS BLOCKING BETTER
A GREAT LAKES STEEL PRODUCT

PATENTS PENDING

Sales representatives in Chicago, Philadelphia, St. Louis, Atlanta, Omaha, Denver, San Francisco and Montreal.

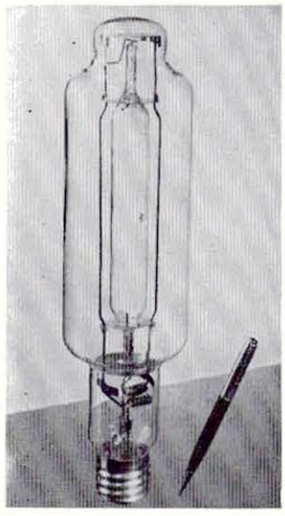
GREAT LAKES STEEL CORPORATION
Steel Floor Division • Ecorse, Detroit 29, Michigan

PRODUCER OF N-A-X HIGH-TENSILE STEEL

NATIONAL STEEL CORPORATION

52-SF-3

NEW and IMPROVED PRODUCTS of the MANUFACTURERS



A 1,000-Watt Mercury Lamp

The General Electric Company has announced a 1,000-watt mercury lamp for general industrial use where medium- or high-bay lighting is desired. The new lamps will be used in plants which produce heavy equipment, in railroad shops, in foundries, and for street lighting and floodlighting.

Producing 52,000 lumens, or 52 lumens per watt, the lamp is the most efficient of G.E.'s general lighting mercury lamps. It is designed to fill in the gap between the 400- and 3,000-watt lamps in the mercury lamp line. Its life rating is 3,000 hours at five burning hours per start, and 4,000 hours at 10 burning hours per start. It operates satisfactorily in any burning position.

Developed in the G.E. Lamp Development Laboratories at Nela Park, Cleveland, the new light source is made to operate on 440-480 volts for highest efficiency. This voltage also makes it possible to operate the lamp with a simple, low-cost ballast.

Designated the A15, the lamp has an overall length of 14¼ in., and its heat-resistant outer bulb is 3½ in. in diameter.

Waterproofing Agent

Mule-Hide Dri-Seal, a non-toxic, ready-mixed waterproofing solution adaptable to both masonry and wood structures, has been made available by the Lehon Company, Chicago. It is a colorless silicon-base penetrant which enters the surface pores of the cellular structures of the material treated, preventing the entrance of moisture. This compound is made in three formulas.

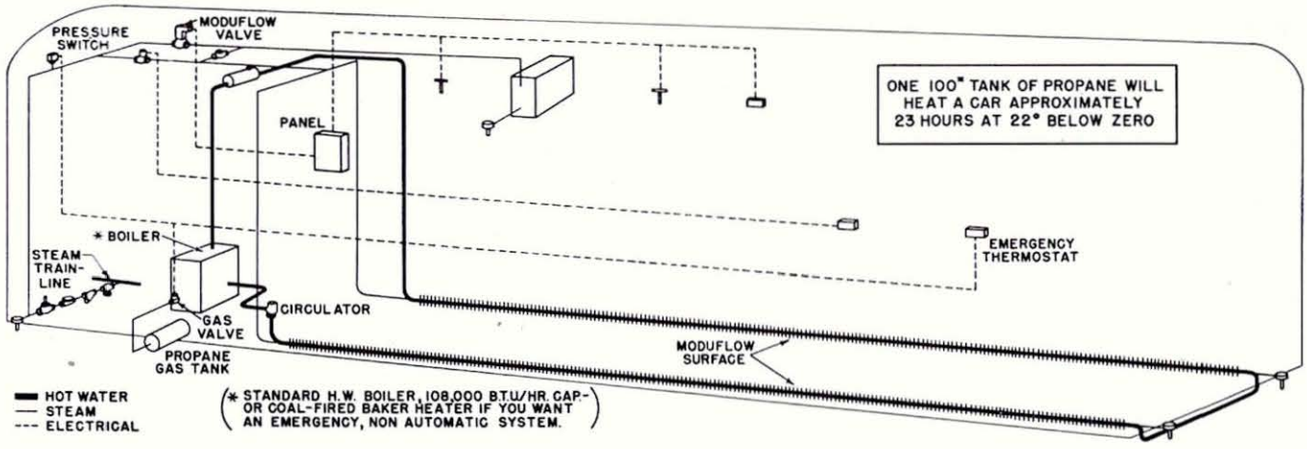
Dri-Seal for masonry becomes chemically, rather than mechanically, bonded to the surface being treated, and thus, the manufacturer states, will not wash off, flake, or otherwise lose its effectiveness from weather exposure. Since it does not allow moisture penetration, buildings and structures so treated will remain clean because dirt-laden rain cannot penetrate. In addition, the manufacturer recommends Dri-Seal for application on asbestos and asbestos-compound surfaces, claiming it will keep such surfaces free from stains and discoloration.

Dri-Seal for wood is also colorless and non-toxic and can be applied by dipping, brushing or spraying. It is said that Dri-Seal for wood contains six times the minimum amount of fungicide necessary to combat fungus, mildew and termite damage. A special formula (not colorless) is also available for conditions of extreme moisture or acid, such as stock pens, fence posts and various industrial applications.

Emergency Heat For Passenger Cars

A means for heating passenger cars when the locomotive runs out of water or when batteries fail has been developed by the Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. It may also be used when a car is not in a train, when it is desirable to use a freight locomotive to haul a passenger train, or during long switching periods.

The device used is a modification of the regular Minneapolis-Honeywell heating system. It consists of a propane gas-fired hot water boiler, controlled by a valve and thermostat, which get their power requirements from the pilot flame. No steam or electric energy is needed. The closed water loop which normally supplies floor heat is run through the gas-fired boiler at one end of the car. A pressure switch starts the boiler automatically whenever the steam pressure on the regular system falls below a pressure of about two pounds. The device may be added to cars now in service.



Developing electrical cables for . . .

means better cables for . . .

Under special assignment from the Armed Services, Okonite is developing a number of electrical cables for highly specialized military and naval uses. These cables must meet extremely difficult specifications and operate under the most critical conditions.

As in the past, experience so gained, when combined with Okonite's regular research program, will result in extraordinary strides in the development of cables for commercial applications. New values have already emerged; standards for electrical strength, flame and moisture resistance, flexibility, life expectancy are being raised.

For example, a synthetic-insulated cable, built to withstand the intense heats of jet engines, is now saving money for industrial plants in hot location wiring. And the tough, highly flame resistant Hazaprene ZBF sheath developed for Navy shipboard cables is now widely in demand because of its added safety factor for mining service.

Okonite's three plants are doing everything possible to meet the needs of the Armed Services and industry. One thing is sure: the cables being developed now will carry industry's power load more dependably, efficiently and economically than ever before.
The Okonite Company, Passaic, N. J.

THE BEST CABLE IS YOUR BEST POLICY

insulated wires and cables 9571

RAILWAY AGE
EDITORIAL COMMENT

MANAGEMENT WHICH "TELLS 'EM" OR THAT WHICH "SELLS 'EM"?

"Our hands are tied" — how often that explanation comes up when management gets critized for not exacting more satisfactory performance from employees. And there's plenty of supporting evidence too — "half-drunk, half-pay" decisions by Adjustment Board referees, for example.

But is this explanation the whole truth, and nothing but the truth? Last fall, F. B. Whitman, president of the Western Pacific, spoke to the New York Railroad Club on his road's activities in the field of employee relations (*Railway Age* November 5, 1951). In his speech he indicated his belief that, if management can't today "tell 'em where to head in," it can, at least, provide educational opportunities and attractions which ought to make it unnecessary to "tell 'em" — or not very often, anyhow. Some weeks later (January 28 issue) an anonymous correspondent took polite issue with some of Mr. Whitman's contentions.

Fear or Defiance?

For one thing, this friendly critic disputed Mr. Whitman's assertion that many employees have a baseless fear of being fired. He insisted, instead, the prevailing employee attitude is one of defiance — "you can't fire me."

No doubt this attitude does exist in many places, but do the facts support the conclusion that it is utterly impossible to get rid of a hopeless non-cooperator? One railroad officer of wide experience advises us as follows:

"I deplore the opinion on the part of some supervisors that nothing can be done to discharge an employee who persistently refuses to do a good job. There still exist legitimate and effective, though perhaps difficult, ways of separating such employees from the service and management should see to it that supervisors have knowledge of these methods, and use them where necessary. However, both management and supervisors should recognize that there usually are better ways to induce improved performance than promiscuous firing; discharge should be used only as a last resort."

Friendly—But Firm

There are, then, some employees who insist they can't be fired when they ought to be, and probably could be. And there are others who seem to have the fear of such treatment when there isn't any reason for it whatsoever. Either mistaken attitude is harmful to employee morale and performance. Either attitude could and would be corrected if supervisors had instilled into them the conviction that management's policy toward employees is genuinely friendly, but also firm; and that neither management nor supervisors will submit to being pushed around by confirmed trouble-makers.

Mr. Whitman's critic also cited instances of arrogance on the part of grievance committees; and expressed the belief that the supervisors' authority may have been undermined during the depression of the thirties—when they had to do a lot of furloughing. They did not relish or understand the need for this action, and they excused themselves by telling employees that it was none of their doing, but "orders from higher up." In other words, they did not identify themselves with management, but

classified themselves merely as the messenger boys for management.

Actually, most of the furloughing in the thirties was not done by the voluntary act of management, but by lack of money in the till with which to pay wages. If the facts management knew had been effectively imparted to supervisors and employees, the furloughing wouldn't have been any pleasanter to take than it was, but the wrong people wouldn't have been blamed for it.

In sum, might not most or all of the negative symptoms cited by Mr. Whitman's questioner be plausibly laid to one single cause, viz., the absence of a consistent policy by management to make known all the pertinent facts about conditions which affect employees — all the way down from the top through the supervision and the ranks? As one railroad president has put it, with perhaps some exaggeration: "They took away our whips so we can't drive any more, and not all of us have yet learned how to accomplish the same results by leading."

"Leadership" vs. "Driving"

The fact is that many businesses, including railroads, are being operated successfully today more and more on the "leadership" principle, as opposed to the "driving" principle. The "driving" method got results under different circumstances from those which now obtain, but it won't work any more and nostalgia for it is futile. The self-interest of owners, management, supervision, and employees of any large and useful business such as the railroads is almost completely identical; and the self-interest of all of them is also very largely identical with the public interest — in the long run. The problem is to get this identity of interest understood and acted upon at all levels.

It isn't any exaggeration to say that the principal difference between what is known as the "free world," and that which isn't free, is that the free part is endeavoring to get people to work together and improve their well-being by everybody's voluntary action — while the non-free part takes the cynical view that people are too damn dumb to cooperate unless driven to it by the lash. In our part of the world what is known as "management" is not a preferred class of "masters," but rather a group of people, chosen usually by a rigorous process of selection and assigned the difficult and vital job of inducing the millons to cooperate, and of organizing their cooperation in the economical production of useful goods and services.

The future of the "free world" depends upon the competency with which management performs — and persuasively explains — its job. If management which thus operates by the method of "selling" doesn't succeed, it will inevitably be replaced by management which "tells" — and not, next time, backed up only by the power to fire, but with whips and a hangman besides. That's the way it is in all parts of the world where economic freedom has been replaced by communism or some variant of it.

OUR PASSENGER CARS VS. EUROPE'S

A European engineer, well versed and widely experienced in his profession, recently visited this country and voiced some interesting opinions on American car design, mostly in the form of questions of the "why do you?" variety. Some of his queries involved matters of taste or could be explained by the differences in the competitive situation in this country and in Europe. For example, he was surprised at the fluting on the sides of passenger cars; he guessed that this must add several thousand pounds to weight and quite a few dollars to cost.

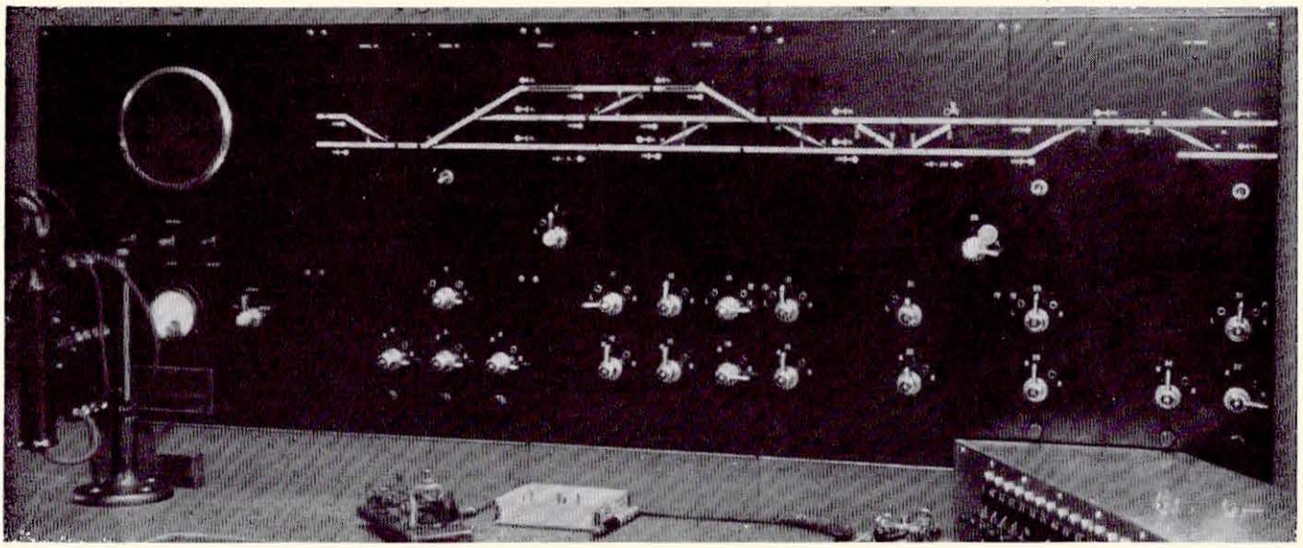
Other questions and observations were more fundamental. Despite the luxurious appearance of our passenger cars, he thought they gave a pretty rough ride—worse than in continental Europe, which is considered poor compared to the riding qualities of English trains. And this despite our heavier rail, trucks and cars (European cars and trucks weigh about half as much as ours).

"Why do you use center sills?," he asked. They are never used to any extent abroad. They are impressively strong but, like the Maginot Line, can be by-passed. He thought it somewhat inconsistent to spend all the money we do and add all the weight we do for safety purposes, and then on some cars have only one vestibule. The opportunity for easy exit after a wreck is thereby reduced. This contention is, of course, highly debatable, but is repeated here for what interest it may have.

Our general ideas on vestibule entrances receive further adverse comment. Fast through trains are excessively delayed at intermediate stations, it was suggested, because it takes so long to get the people off and on. This is especially true on roads that put all passengers for one station into one car, all those for another in a second car and so forth. The train thus has to wait while all those detraining and entraining "bottleneck" through one, or at the most two, restricted passageways.

Lest one suspect that this engineer was just a crank trying to pick flaws in everything he could think of about our railroads, we mention also some favorable comments he made. For one thing, he was most favorably impressed by our automatic couplers. Coach and parlor car seats and sleeping accommodations are tops. Air conditioning and ventilation in this country are much more reliable and advanced than overseas.

His comments are worth some thinking, because they raise the question whether our concepts of design are as superior in all respects as we sometimes think. Even if, in general, they are better and better adapted to our particular conditions, are they so good that we might not pick up and incorporate at least a few good ideas from foreign design? It is worth some reflection, particularly, that so many people who have traveled or railroads in other parts of the world believe our equipment rides rough.



One modern panel consolidates the control of three interlockings.

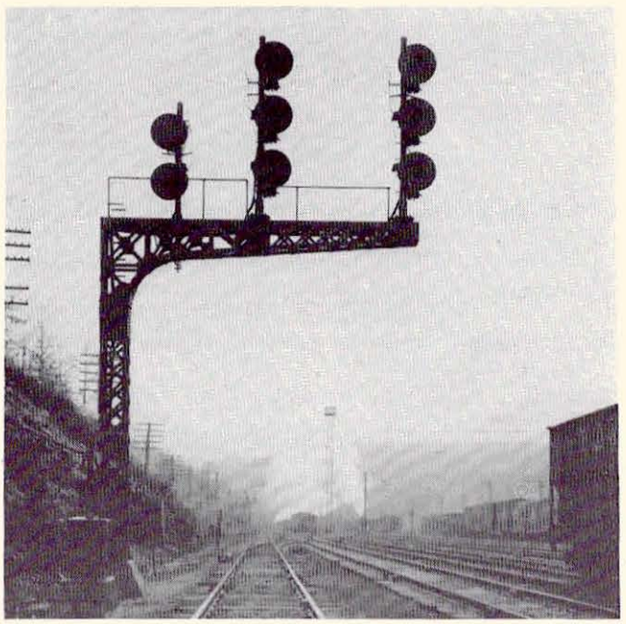
Train Movements Coordinated

By Consolidated Control of Three Interlockings

At Oakdale, Tenn., the Southern has installed three new electric interlockings controlled from one new panel—Signaling provided for train movements in both directions on one main track

The Southern has recently completed an installation of new signaling and an interlocking replacement at Oakdale, Tenn. The project includes (1) consolidation of three interlockings; and (2) new signaling for train movements in both directions on the northward main track between the remotely controlled layouts. The daily movement through Oakdale includes six all-year passenger trains, and 28 to 36 freight trains. For about five months each year, during the Florida tourist season, two additional passenger trains are operated.

Oakdale is 254 miles south of Cincinnati on the route to Chattanooga, Atlanta and New Orleans, and also to the Carolinas via Knoxville and Asheville. The new remote-control project extends 12 miles through mountainous territory, the railroad being located in the ravine of the Emory river. When the original single-track railroad was constructed, five tunnels were required in this section. When the second main track was added, about 1904 and 1912, the sections through the tunnels were left as single-track main line, four ends of double track being established at: CW Tower; Nemo; at the north end of Tunnel No. 25, and the south end of Tunnel No. 26.



New signals direct trains in both directions on the "north" track, leaving "south" track for yard switching moves.

In 1904, a 12-lever electric interlocking was installed at DB Tower between tunnels No. 25 and No. 26, to control the entrance to the yard just north of tunnel No. 25, and the end of double track at the south end of tunnel No. 26. In 1912, a 16-lever electric interlock-

Remotely controlled switch machines and signals increase capacity of single track sections through tunnels.

ing was installed at CW Tower, including the ends of double track at CW and also at Nemo, 1.5 miles away. Years ago, a 28-lever mechanical interlocking was installed at GF Tower near the yard office, to include a crossover between the two main tracks, and two yard exit switches leading to the southbound main track.

In 1951, the three old interlockings were completely replaced with modern electric interlockings. Operation of all three of these new interlockings, and the movement of trains by signal indication, as explained below, are controlled from a single new panel at GF Tower.

Signaling Helps Solve Yard Problem

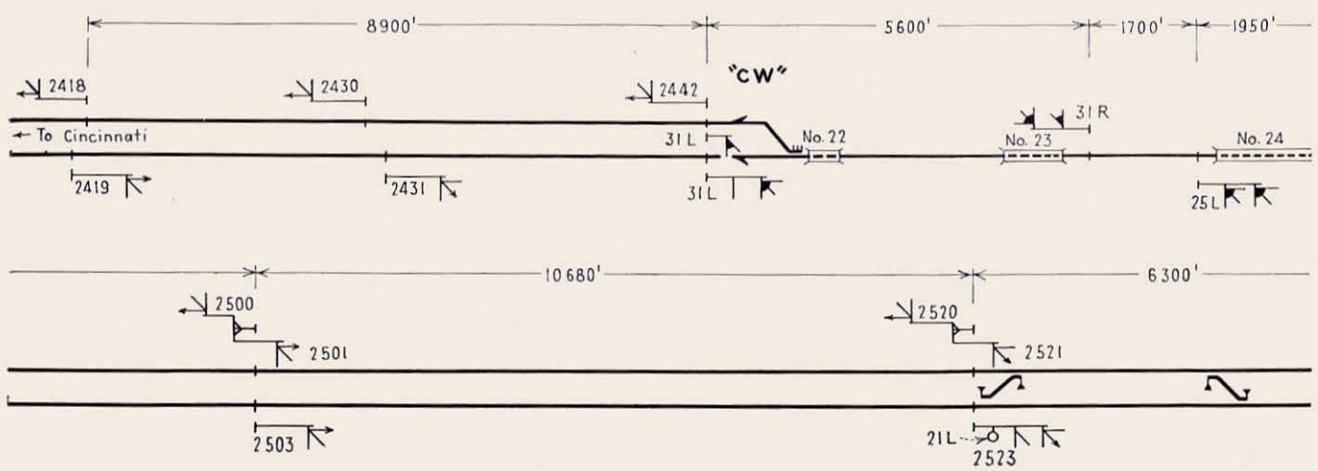
The project includes new signaling for train movements in either direction on the northward main track between the remotely controlled layouts. By using this signaling to operate through trains on this one track, the southbound track can now be used in making up trains, thus saving time.

Oakdale is the western terminal of the Southern's Knoxville division, and is also an intermediate terminal of the C.N.O.&T.P. division, at which freight train crews change. From Chattanooga north to Oakdale, 84 miles, the ruling grade is about 0.75 per cent, but from Oakdale north the ruling grade increases to 1.25 per cent. Therefore the northward tonnage rating of locomotives is reduced at Oakdale. This requires considerable switching.

The yard tracks are too short for some freight trains now being operated. Because of the narrow confines of the valley in which the yard is located, the construction of additional tracks or extending the length of the yard is not practicable. Generally, the south yard is long enough to receive trains from the south and east, and to make up trains for the north, but fast freights for the north are switched on the northward main track whenever passenger schedules will permit.

Trains for the south and east were a greater problem because tonnage was increased, and the resulting trains were often longer than the yard tracks. In such cases it was necessary to shove the rear end of the train back through the north entrance switch of the yard, and thus block the south main track. Prior to installation of the new signaling, these trains were switched in two tracks, until the south main could be used to consolidate the two cuts of cars. Since the north entrance to the yard was blocked while the train being worked was shoved out, it was often necessary for protection to hold important trains at CW Tower while a train was being made up.

Some measure of relief was obtained in 1949 by adding a No. 20 main-track crossover to the existing mechanical interlocking at GF Tower, and installing two-direction signaling on the northbound main between GF Tower and Tunnel No. 25. This permitted use of the south main between GF Tower and Tunnel No. 25 for receiving and switching fast freight connections for the south and east that were too long for any yard track, and left the north main open for signal-controlled train movements in either direction. Since this portion of south main is the normal exit track for freight trains leaving the yard, bound south and east it could not be blocked for long periods of time, and there was still the necessity of shoving some trains out on the south main at the north end of the yard. With the completoin of track changes at the north end of the yard, in conjunction with the new signaling (all of which was completed in 1951) the yardmaster can now use a portion of the south main to move out these long trains, and at the same time accept other trains from the north, as fast as capacity is available to handle them.



Track and signal plan of 12 miles of single track and double track sections where control

The track change was effected by cutting the outer yard track loose from the ladder at the north end of the yard, extending it parallel to the main tracks, and connecting with the south main opposite the north end of the crossover north of the north entrance switch to the yard. A little used crossover was relocated as a facing-point crossover about 2,900 ft. north of this new turnout. The long trains are now built on this outside track, and are shoved back on the south main as necessary.

Access to the yard from the south main, while a train is being moved out, is through the two crossovers, and from the north main through the second crossover. The new signaling permits operation by signal indication, superseding superiority of trains, on the north main between Nemo and GF Tower. Special signaling was required to authorize trains to enter this controlled track from the south main through the crossover mentioned above, in order to enter the yard, or to proceed on the north main, according to telephone instructions received before crossing over.

Stop at Hand-Throw Crossover

Southbound Signal 2523 is located 50 ft. ahead of the new facing-point crossover. It is a two-"arm" searchlight signal, arranged so that only the top "arm" displays an indication for normal southbound moves. Below the second "arm" there is a marker, with 8⅜-in. clear glass roundel, on the inner face of which is ground and painted a letter "X." The lamp in this unit is normally extinguished. When a train is to be routed around a train standing on the south main, control is sent out from the control panel at GF Tower that causes Signal 2523 to display a Red-over-Red aspect, and to illuminate the letter "X" in the marker. The same control releases the electric locks on both ends of the hand-throw crossover. The illuminated "X" is authority to throw the switches of the crossover.

After the crossover route is correctly lined, Signal 2523 will display Red-over-Yellow, provided the way is otherwise clear, and the marker will be extinguished. The train then proceeds on signal indication on the north main track to GF Tower. The second crossover is also secured with electric lock, controlled from the panel at GF Tower. Train movements through these hand-operated crossovers are not sufficiently frequent to warrant power-operated switch machines.

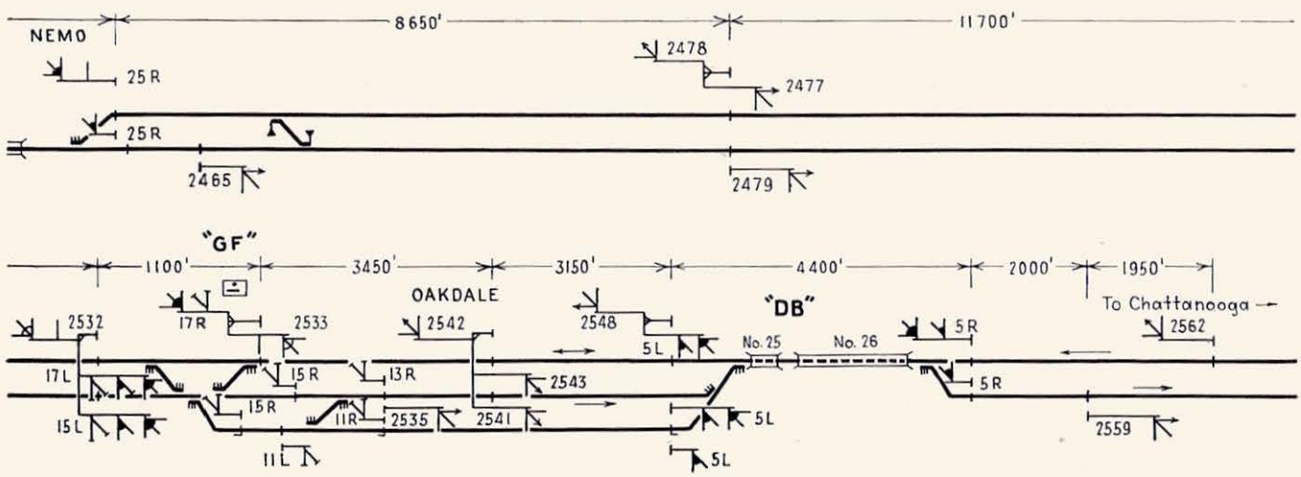
Entrance at each end of the two separately controlled sections of northbound track is by interlocked control at Nemo, GF Tower and Tunnel No. 25. Absolute permissive block type signaling is used, and the intermediate signals are held in the Stop position behind trains to prevent a reverse move being made on a proceed signal indication. In addition, each section is controlled by a track-controlled traffic lever on the control panel.

Operate in Either Direction

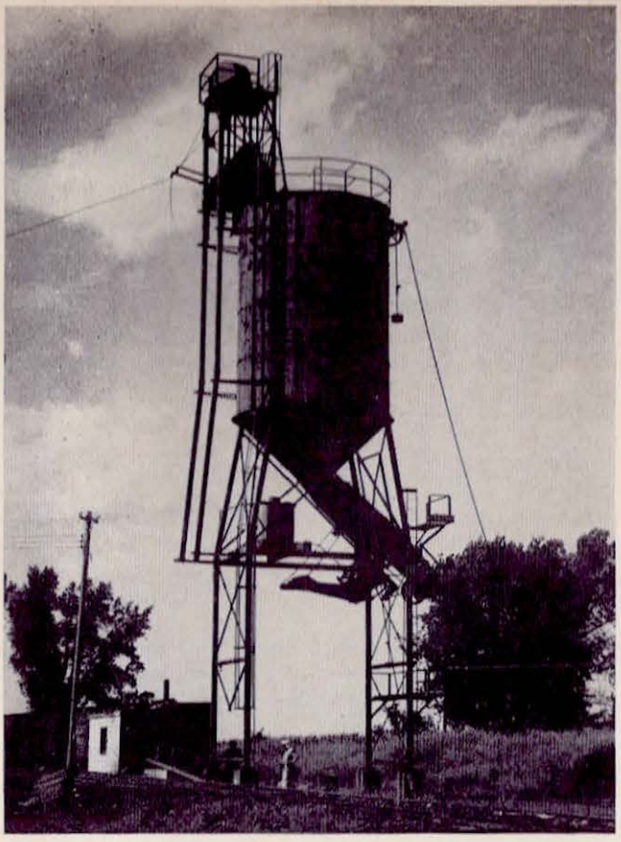
During periods when the south main is blocked, passenger trains are operated in either direction over the north main between Nemo and GF Tower. At GF Tower, southbound passenger trains are crossed over to the south main or continue on the north main to Tunnel No. 25 as conditions require. If the north main between Nemo and GF Tower is not needed for northbound trains, southbound freight trains are operated on that track to the north end of the yard. Crews of southbound fast freight connections, scheduled to be worked on the south main between GF Tower and Tunnel No. 25, are so advised where practicable by message at RO Tower, which is 32 miles north of Oakdale. The operation of trains in this manner is flexible, and has resulted in greater yard capacity and less terminal delay.

This signaling project was planned and installed by Southern Railway forces, under the jurisdiction of L. C. Walters, assistant to vice-president, signal and electrical, and under the direction of H. A. Hudson, signal and electrical superintendent, Lines West. L. C. Brown, signal and electrical supervisor, had supervision of the field construction forces. The major items of signaling equipment were furnished by the General Railway Signal Company.

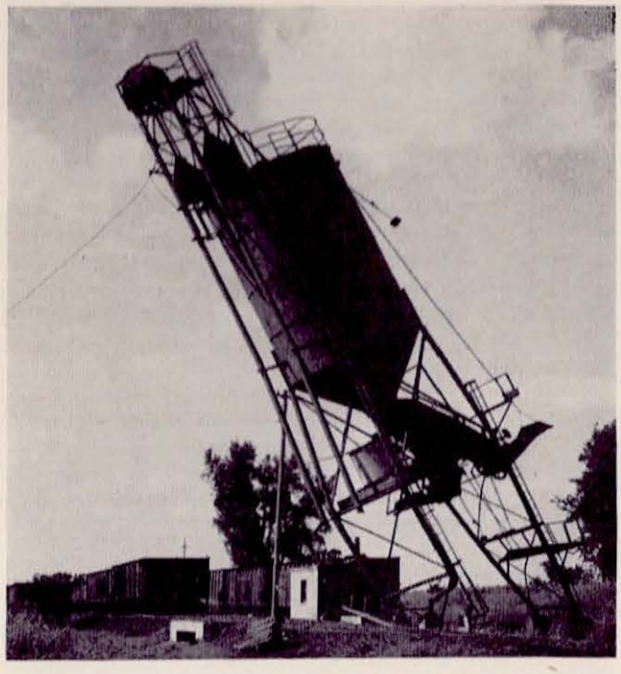
"Railroads are the only transportation concerns that pay their own way. They build and maintain their own tracks and terminals. They pay heavy taxes on all their facilities. They receive no subsidies from the government. Buses and trucks travel over highways built and maintained by local and state governments. Airlines use airports built by federal and local governments. Waterways are improved and maintained by the government. Amounts paid for the use of these facilities are only a fraction of their cost. The railroads haven't had a square deal in the last half century. It is high time for the people to realize this fact and do something about it."—*Council Bluffs (Iowa) Nonpareil*



of new interlockings was consolidated and new signaling installed to increase track capacity.

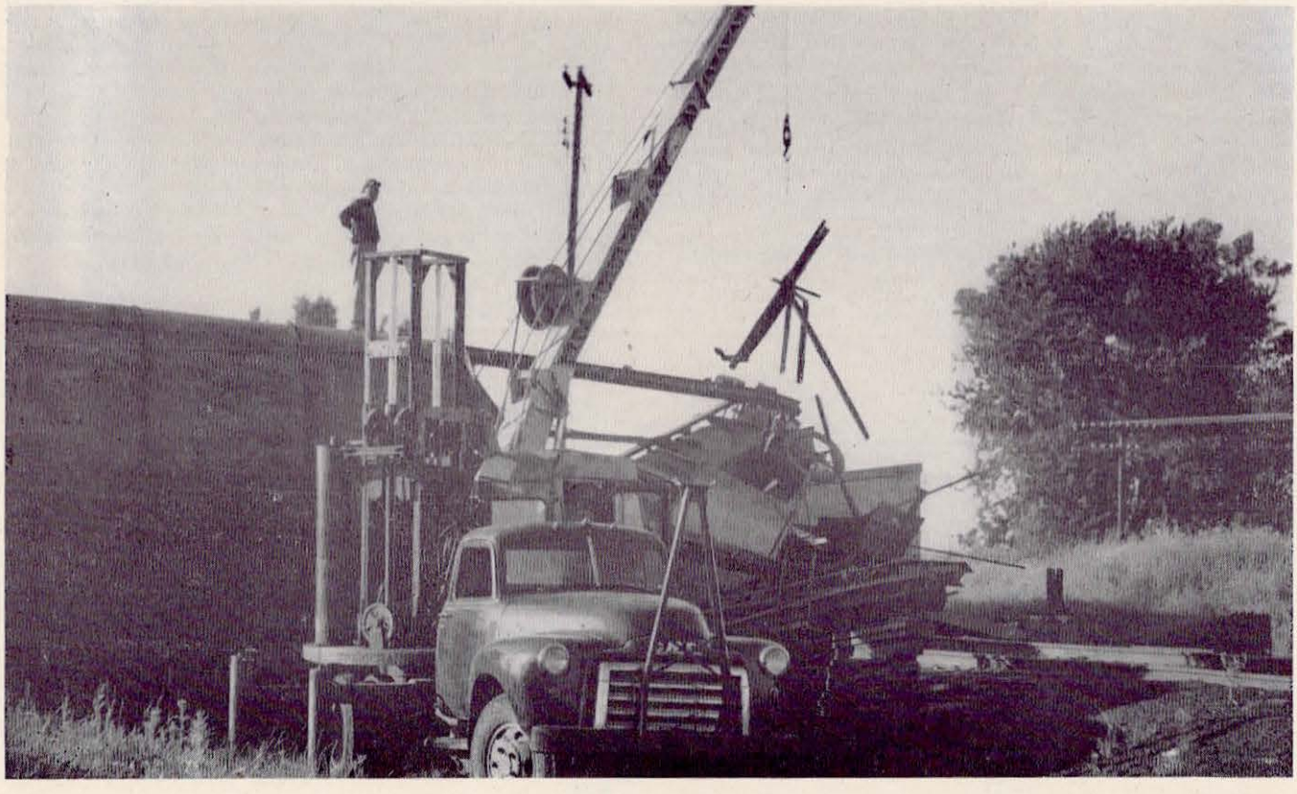


Standing 65 ft. high, this steel coal chute at McIntire, Iowa, is typical of those removed on the C.G.W. as a result of dieselization. One end of a line was attached to the top of the chute and the other end to a truck-mounted crane.

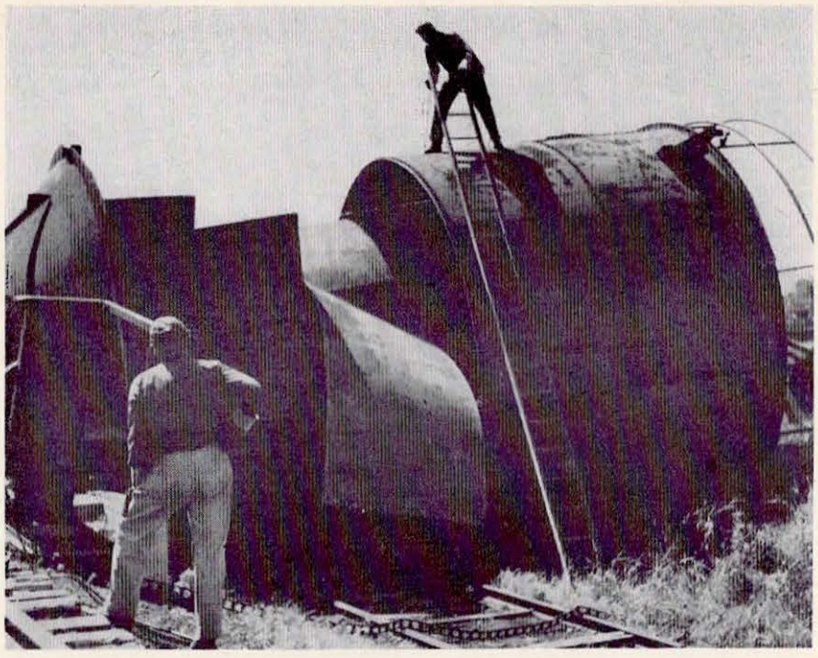


Although it gave years of useful service and withstood weather and high winds during that time, the chute, with its ties to the concrete piers cut away by oxyacetylene torches, easily succumbed to the pull on the cable and toppled over.

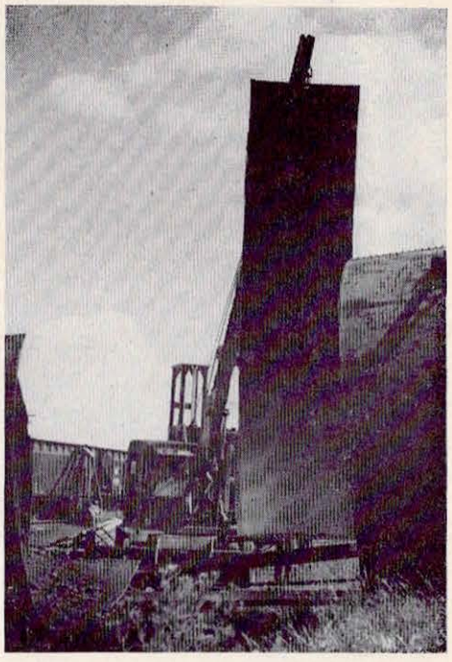
Coal Chutes Go When Diesels Take Over



After the structure had fallen clear of the main track, the next step was removal of the structural members, which were cut up and piled beside the tracks.



Here is the fallen hopper after a number of sheets had been removed or cut loose. At this time about 10 tons of coal were discovered inside. Before any more torch work was carried out, the coal was removed by a clamshell bucket attached to the crane.



With most of the coal removed, the remaining steel sheets could be safely cut away. Scrap was loaded in a gondola in about an hour.

Steam-locomotive fueling facilities in 35 towns on the C.G.W. were torn down, along with some water stations, to eliminate further maintenance and to recover scrap and usable material

The fact that it takes only minutes to tear down sturdy structures that required months to build and which served a useful purpose for many years is one of the less romantic aspects of dieselization of motive power on the railroads. This phase was brought out in bold relief on the Chicago Great Western when, following complete dieselization, this road undertook to dismantle the steel coal chutes in some 35 communities on its lines in Illinois, Iowa and Minnesota. This work, which was recently completed, also involved dismantling a number of water storage tanks.

The dismantling work, which began about the middle of 1950, was done by the Jacobson Steel & Supply Co., Dubuque, Iowa. A crew of four men, equipped with acetylene torches, saws and a truck-mounted, Bucyrus-Erie Hydrocrane, was assigned to the job. The Jacobson Company recovered 25 to 35 tons of scrap iron and steel from each of the metal towers and chutes.

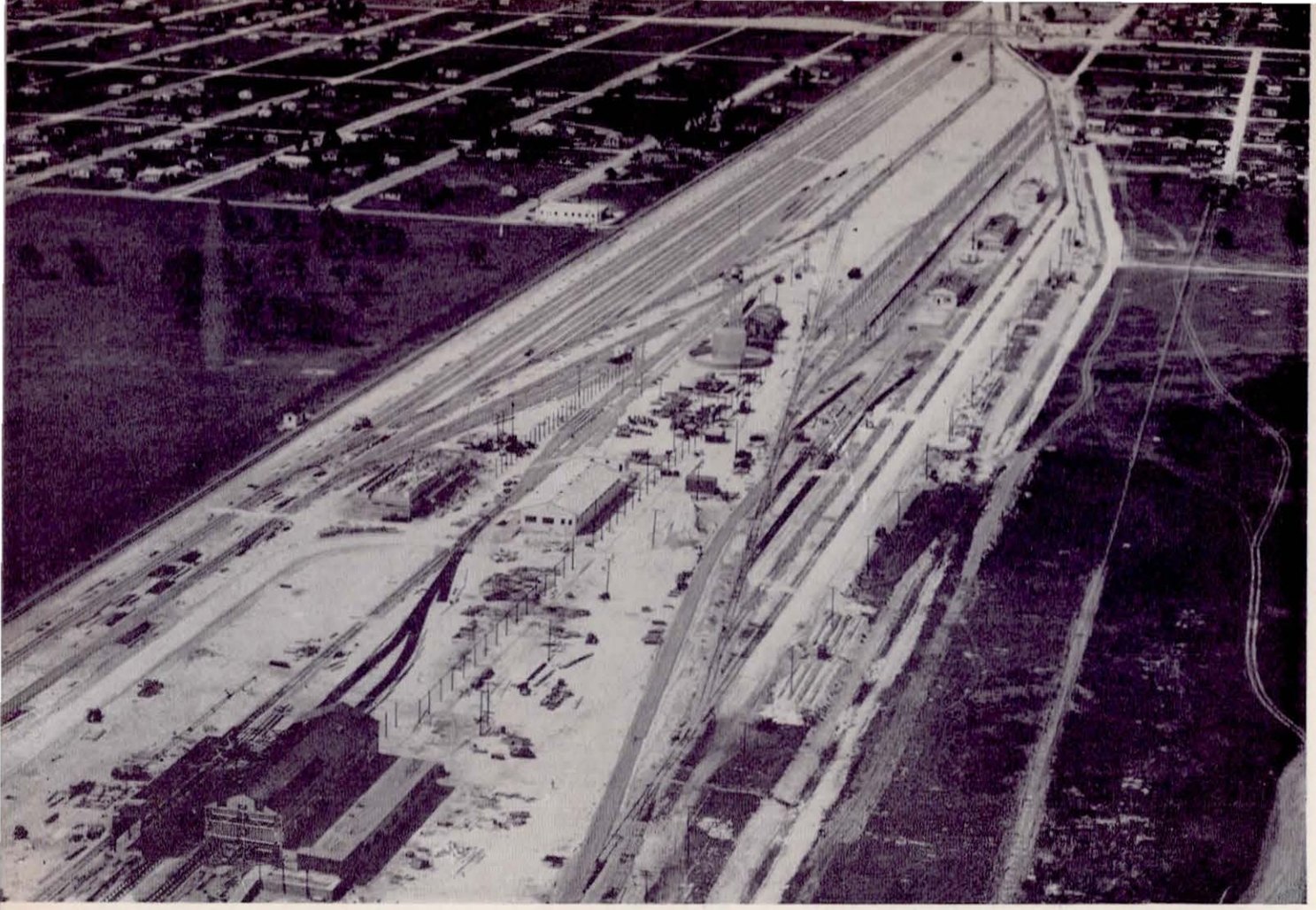
How It Was Done

Typical of the procedure used in the work was the operation at McIntire, Iowa, where the steel coal chute and a wood water tub were to be felled. As a preparatory step the crew foreman checked train schedules with the yardmaster because the 65-ft. coal chute, first to fall, was to be dropped across a main line and a siding. With the timing established so as not to interfere with traffic and after a cable had been stretched from the top of the structure to the truck on which the hydraulic crane was mounted, two men with torches cut the two steel columns supporting one side of the chute. Next, while the truck took up the slack in the cable, the bolts which held the other two supporting columns to their concrete bases were cut, allowing the chute to topple over.

When the dust had settled, the structural members were cut into sections for convenient handling and the ¼-in. steel sheets which formed the hopper part of the structure were cut into sections. As the pieces were cut free, they were stockpiled with the crane. When the first sheets were cut from the hopper, more than 10 tons of coal were found inside, which apparently had been jammed in the throat of the hopper. To remove the coal so that torches could be safely used on the remainder of the hopper plates, a ⅜-yd. hydraulic clamshell bucket was attached to the crane. With dismantling completed and the scrap piled beside the tracks, a gondola was spotted beside the pile and the crane was used to load the scrap in about an hour.

The 35-ft. wood water tub was next. The roof was removed first, after which the side staves were sawed off and dropped to the ground. The supporting timbers were then pulled over, sawed into lengths which could be handled easily, and loaded by the crane. All lumber suitable for re-use was shipped to saw mills for resawing.

The most work at a single location was done at Sycamore, Ill., where a steel water treating tank, an older type 85-ft. coal chute and a turntable were scrapped. So as not to damage the sheet metal of the coal chute more than necessary, this structure was dismantled from the top down. The procedure here was to cut a hole in each plate at a riveted joint so that the plate could be supported by the crane hook while it was being cut free.



Airplane view of the new yard three months before its opening.

Seaboard's Modern Yard Now Serves Miami

New facility replaces an old yard that was located in the middle of an airport

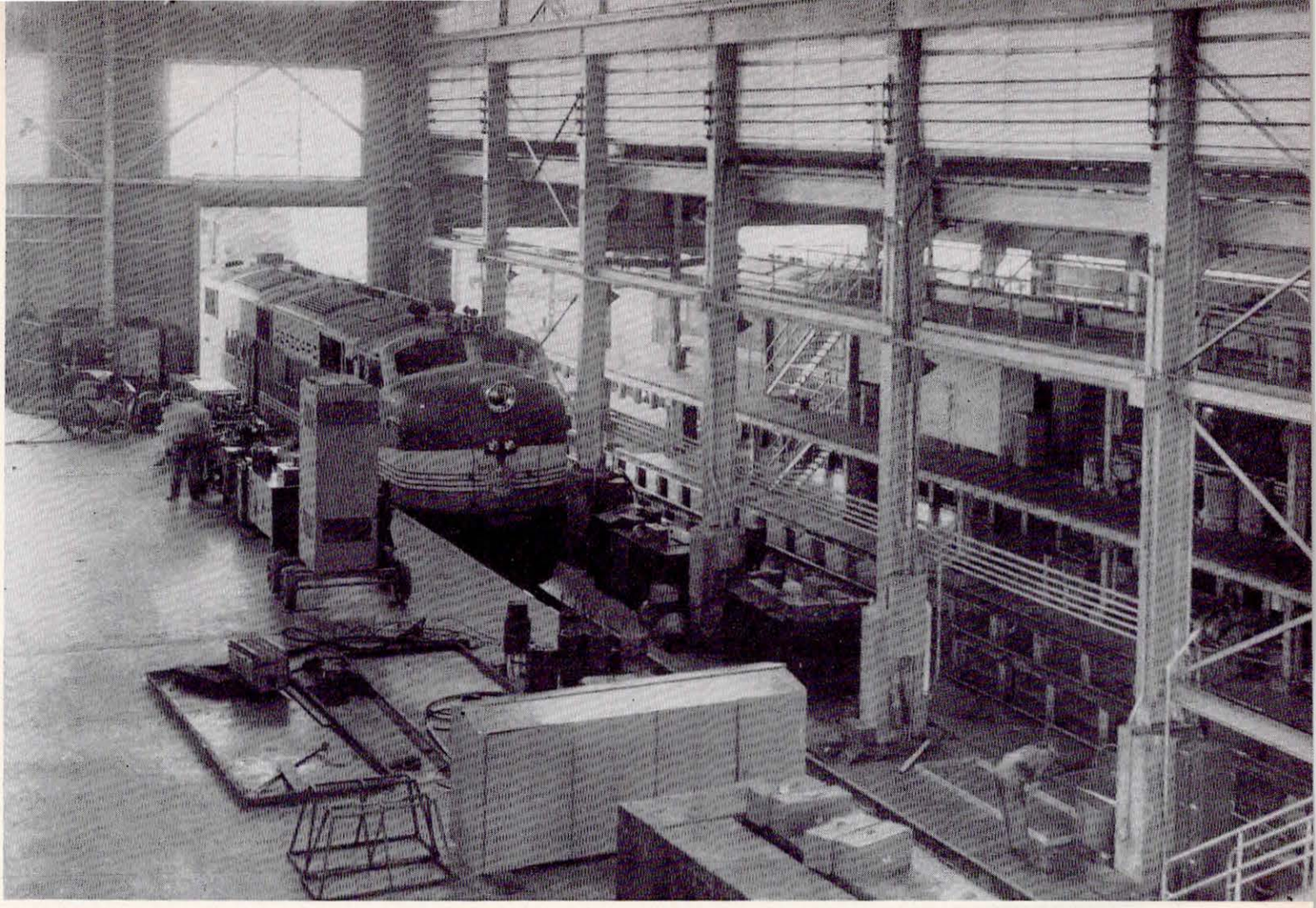
The city of Miami will one day grow out and envelop this yard." When this statement was made by the late Eugene Bagwell, then general manager of the Seaboard Air Line, those who heard it were skeptical to say the least. It was in the twenties, the Seaboard had just completed its line into Miami and the Florida boom had just collapsed with a resounding crash. At the time, the new Seaboard passenger station seemed to be away out in the country, while the yard appeared to be in the middle of the Everglades. It took a quarter of a century for Mr. Bagwell's prediction to come true. By then the passenger station was in the middle of a thickly settled section of Miami and the yard was in the middle of an international airport—with planes crossing the tracks at grade.

Last year this yard area was turned over to the Dade County Port Authority to be incorporated in the airport and operations were shifted to the new Hialeah yard, some four miles to the north. The negotiations that resulted in the change were described in *Railway Age* of December 30, 1950, as were also many of the engineering features of the yard then under construction.

Room to Move About

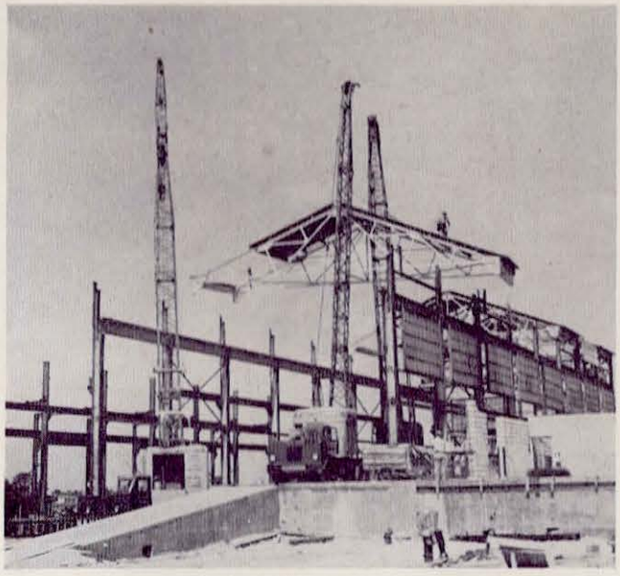
The new yard was specifically designed with all-diesel operation in mind and the overall impression is one of cleanliness and spaciousness. With the exception of the central portion of the diesel shop, the buildings are all new, eminently functional in design, and well adapted to the Florida environment. Paved driveways afford easy access to ample parking spaces for employees' automobiles. A concessionaire operates a restaurant and a general store for employees on the ground floor of the dormitory building and also supplies an employees' lounge equipped with a television set. Power ventilation is provided for all buildings in the yard, and the dormitory is compartmented by metal partitions and curtains. Each of the center rooms has a fresh air outlet so the occupant can regulate ventilation. Power ventilators exhaust the air through ceiling grills from the entire floor area.

The new yard is seven miles from the passenger sta-



The diesel shop at Hialeah yard is spacious and well-designed.

Ample parking space for employees is adjacent to the diesel shop.



The central portion of the diesel shop was moved five miles and re-erected.

Nearly ten thousand items are stocked in the new storehouse.

An employees' lounge, with television set, is located close to the restaurant.

tion. Three miles of new track were built to provide a double-track line for the entire distance. Since five passenger trains are operated in each direction daily, with numerous extra sections during the winter tourist season, the yard facilities had to be designed with the necessarily quick turn-around and servicing of these passenger trains in mind.

Four of these pairs of trains are scheduled in and out with enough layover time between so that no particular problems are involved. With the "Silver Star," however, it is a different matter. This train is scheduled to arrive at 11:00 a.m. and to depart at 4:40 p.m. and in order to allow adequate unloading time and standing time in the station prior to departure, fast work is required. As soon as the train has been unloaded, it is pulled away from the station. After running the seven miles to the yard it is turned on the loop track at the south end of the yard, which has a maximum curvature of 10 deg. After it is run through the automatic car washer, the interior is cleaned and the supplies are loaded. Getting this train serviced and from and to the passenger station requires advance preparations and fast work on the part of everybody concerned.

Serving a Convention City

In addition to the regular passenger trains, numerous extra sections must be handled, not only to accommodate peak periods of regular travel, but also because of the numerous large conventions held in Miami. So far as regular travel is concerned, the peak arrivals are concentrated into a period of a week or ten days and, some weeks later, the peak departures are similarly concentrated.

The peak of the winter tourist travel coincides almost exactly with the peak fruit and vegetable movement northbound out of southern Florida. National conventions to which Miami frequently plays host require special preparations. The American Legion held its convention there last fall, and in June 1952 the Seaboard expects to service and park some 300 passenger cars in the Hialeah-Miami area at the time of the Shrine convention in Miami.

Operating methods have been worked out so that the recurring peak movements are practically routine and the new yard has been designed to take care of them expeditiously. The movement of freight and passenger trains through the yard is segregated as much as possible so that there is little interference.

Better Working Conditions

In addition to the facilities for parking and for use of trainmen and enginemen laying over between runs, the new yard has additional features which make for improved working conditions. Prominent among these are the paving and generally better conditions adjacent to the tracks. Also, toilet facilities are located where they will be most convenient for large groups of employees working in the yard.

Operations are also materially aided by the installation of two-way voice radio communication, with a range of ten miles. The transmitter in the passenger station is equipped with remote control operated from the new Hialeah yard office and all switch engines normally working in the Miami terminal are equipped to receive and transmit messages. In addition, the general yardmaster's automobile is similarly equipped, so that he is instantly available for decisions anywhere in the large and sprawling terminal area.

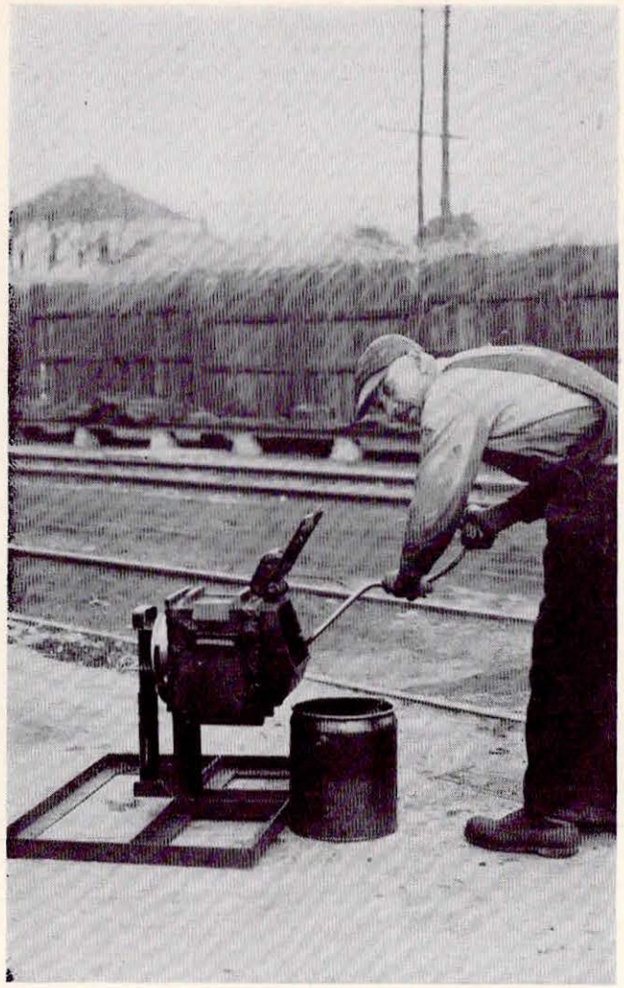


Fig. 1—The box is mounted on the stand at the same height as a journal box on a car.

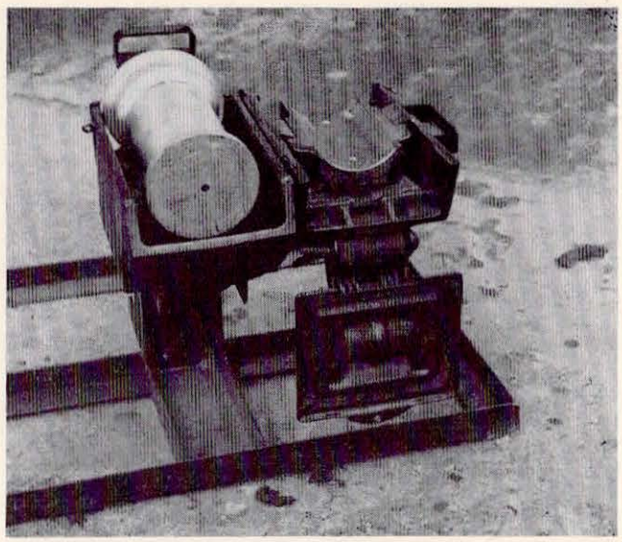


Fig. 2—The top half of the box is hinged so that it may be swung to one side.

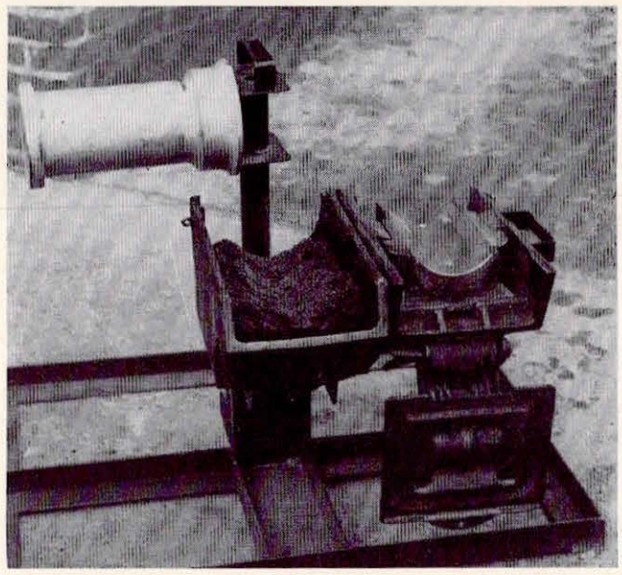


Fig. 3—After the hinged top is swung out, the journal may be lifted and turned to completely expose the packing.

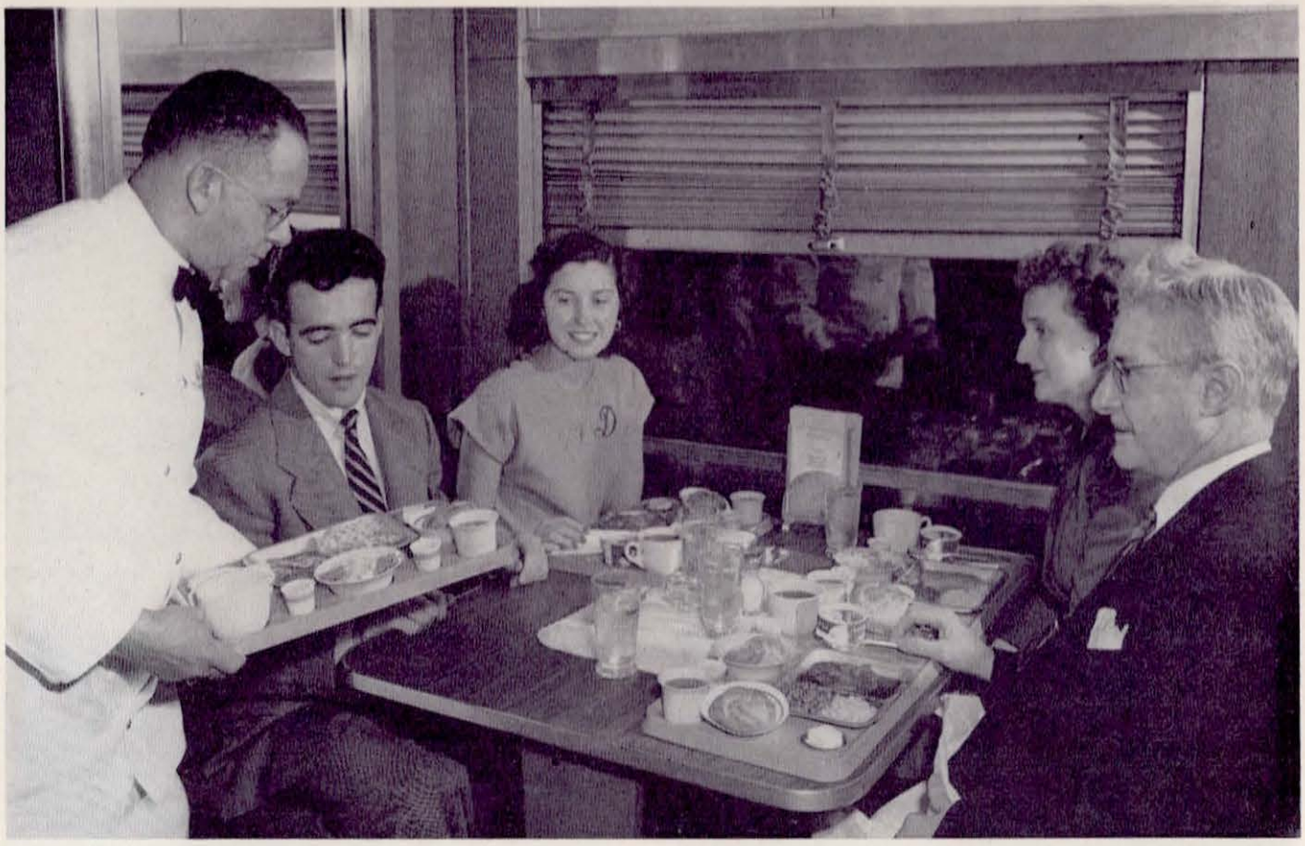
One Way to Avoid Hot Boxes

In an effort to reduce hot boxes on freight and passenger cars, the Atlantic Coast Line has instituted a vigorous campaign of instructing all car men and box packers in the art of journal box packing. It was suspected that many men—particularly "old timers," who were supposedly well versed in the art of box packing—might not be accomplishing the results desired.

A model of a journal box, which could be used as a demonstrator and which would show the condition of the packing, was developed at the Coast Line's Emerson Shops, Rocky Mount, N. C., under the direction of Shop Superintendent R. W. Tonning, Jr. This box, as shown in Fig. 1, is set up at the approximate working height of a journal box on a car. As shown in Fig. 2, the top of the box is hinged so that it can be opened and the general packing arrangement inspected. Then, as shown in Fig. 3, the journal can be raised and swung out of the way so that a complete view of the packing is available.

The usual procedure is to instruct a box packer to pack this model box, which is closed as for normal operation, just as he would pack a box on a freight or passenger car. Then the box is opened so the employee can see for himself how well the job is done. During demonstrations held with the first of these models, it was surprising to learn how many men were astonished to see what actually were the results of what they had thought was a perfect packing job.

The improvements in performance obtained from holding instruction classes with the initial model at Emerson Shops were so gratifying that ten additional models have been made and distributed over the railroad for educational purposes. Instruction classes are held, not only for mechanical department forces, but also for transportation forces so that they too can pack boxes properly if an emergency develops en route.



Effective use of precooked frozen foods in railroad dining car service depends upon the successful solution of a myriad of small problems. For example, when tray service is elected, table height should be about 1½ inches lower than normal.

What's the Status of

Precooked Frozen Foods?

- ***Experience shows they can be effective for reducing dining car losses***
- ***They must be used with discrimination and care***
- ***Misuse can bring quick failure***

Whether present dining car losses can be substantially reduced—if not eliminated altogether—through the introduction of precooked quick-frozen meals is a subject being given careful thought and attention by railroad management. The Chesapeake & Ohio and Frigidinner, Inc.—the Philadelphia concern which prepares the frozen meals used by the C.&O.—believe this type of food may hold the key to self-supporting railroad dining car services. The experience of the C.&O. with this innovation was described in *Railway Age*, March 24, page 30. This railroad and others that have explored the possibilities of this service have discovered that the transition from conventional dining car techniques to precooked frozen food service—though it may appear to be elementary and easy to accomplish—requires careful planning and supervision.

Quick-freezing precooked foods is a new branch of food science. It received its start during World War II and began to "take" commercially in 1946, when it was introduced on Pan American Airways overseas flights. There it has since been in steady and apparently satisfactory use. More recently it has been introduced on Colonial Airlines and on Trans-Canada's transoceanic flights. The U.S. Air Force uses precooked frozen meals on its B-29 and B-36 flights. The Chesapeake & Ohio—believed to be the first railroad to use this type of food in regular service—is gradually expanding its use of precooked frozen foods.

A Spartan type of tray service is not necessary—though it has proved economical and successful on the C. & O.

Meals can be transferred from the aluminum heating platters to regular plates in the kitchen and served conventionally.

Essentially the use of precooked, quick-frozen foods on railroad dining cars is the same as on airplanes—except that the railroads, with their less rigid space and weight limitations, generally have the means to handle these foods even more effectively.

There is no technical library on precooked frozen foods—no place any one interested in acquiring a background in this new type of food preparation and service can obtain factual material. A large amount of trial and error experimentation is still necessary.

Frozen Food Diners

Railroad interest in the use of precooked frozen foods has been cautious. Management has recognized that successful application of this new type of food must be preceded by, and based on, carefully planned and executed educational programs for passengers and employees alike. This has been an important element in the C.&O.'s success in introducing its new service, and in its sucecssful use on air lines. Precisely how much training should be given employees, and how it should be given, appear to be matters of varying opinion—though the elements in the particular service involved do have a definite relationship to the requirements.

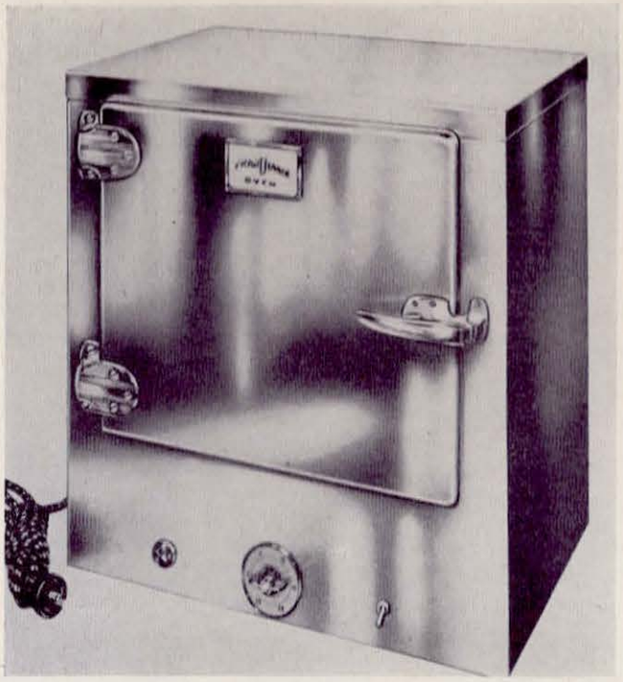
There are several recorded cases—some quite recent—where this new type of food service worked out unsatisfactorily and was discontinued. Although other factors were involved, some observers noted what appeared to them to be inadequate advance planning, insufficient training of employees, and a lack of careful, interested supervision.

Precooked frozen meals may be either prepared in centrally located, specially equipped railroad-owned kitchens, or purchased from commercial suppliers. Most of the commercial suppliers are now located on the east coast. The Chesapeake & Ohio purchases its ready-prepared meals from Frigidinner, Inc.

Railroads with large dining car volume may prefer to establish their own kitchens and do their own cooking and freezing—like the Rock Island, which is gradually preparing for the introduction of precooked frozen meals on its dining cars. In addition to requiring the proper equipment and facilities, such an operation appears to require the full-time services of a food chemist well trained in the chemistry of quick-freezing. Also essential is a good working knowledge of the proper cooking and freezing technique for each individual food item prepared, because various foods react differently when frozen. Different foods must be cooked differently and frozen at different temperatures in order to obtain best results.

Kitchen and galley changes for the use of frozen meals are simple. Cars built since 1946 generally have mechanical refrigerating units with ample refrigerated storage space available. In these cases, all that is involved is adding condenser coils to the existing unit to secure reduction of the temperature to zero or lower. For cars having wet ice refrigeration, there is available a frozen food "holding box" using dry ice.

The two or three ovens required may be mounted on top of the conventional ranges. The electric ovens currently available use 3,000 watts, and can be obtained for 32- or 64-volt d.c., or 110-volt a.c. current supplies. These ovens measure 24 in. deep, 19 in. wide, and 20 in. high, outside dimensions. They are durably constructed,



A 12-plate electric oven specifically designed for reconstituting precooked, quick-frozen meals is on the market. A butane gas oven is in the process of development.

Five years of continuous use in air line service has demonstrated that proper planning, training and supervision are important in the successful use of precooked frozen meals.

heavily insulated, and equipped with a heat-circulator fan and an automatic timer. A butane gas oven (which will have some limitations) is in the process of development, but not yet ready for production.

Should it be possible to design an entirely new kitchen especially for the handling of precooked quick-frozen meals, only half the space normally allotted to a dining car kitchen would appear to be necessary.

There are two optional methods of serving precooked frozen meals.

Service Methods

(1) A tray service—similar to that used by the C.&O. —may be adopted. This form is highly recommended by the C.&O. and by Frigidinner because it permits fast service and low prices. These features in turn attract more customers.

(2) Plate service, in which the food is transferred to a conventional china dinner plate in the kitchen and served in the traditional dining car manner, is also possible. The Rock Island is reported to be considering this type of service, though its critics charge that it is slower and somewhat more costly.

Successful use of a tray service requires adoption of an entirely new, stylized serving technique. It is an extension of the grill car and coffee shop car technique where the emphasis is on good food, well served, at moderate prices—rather than on "plush" physical comfort and expensive table finery.

There are many small corollary problems which must be solved before a tray type of service receives wholehearted public support. For example, the C.&O. found it necessary to equip its car with a thermostatically controlled heating jug to keep soup constantly at the proper serving temperature. This arrangement was evolved because, if the soup is so hot at the time the tray is served that the patron must wait for it to cool, the rest of his meal likewise cools. And if the soup is too cool there are complaints.

Another important factor involved in tray service is the necessity of weaning experienced travelers away from the traditional, leisurely "dinner in the diner." Tray service is predicated on rapid turn-over at low prices.

It has been found that public taste differs widely in various parts of the country and even more markedly with a tray type of service than with conventional diners.

Thus the C.&O. learned that menus and service techniques which were popular on the run between Washington and Charlottesville, Va., for example, were decidedly less popular between Chicago and Grand Rapids, Mich.

The processors assert that precooked frozen meals will keep almost indefinitely when held at a temperature of zero or below. In fact, commercial suppliers guarantee their meals for one year. But it is desirable to keep a rotating inventory with the packages individually dated so that the first in becomes first out.

Experience indicates that a definite technique and skill are required in "reconstituting" frozen meals. Exactly the same amount of heat must be put back into the meal as was taken out. Too much will burn the food—or at least dry it out—and too little will leave it cold and unappetizing. The temperature of the food package at the moment it goes into the oven governs the time it should be heated. The importance of proper timing is one of the reasons users of this type food have found thorough training of employees to be essential.

In general, most precooked frozen meals must be kept covered while being reconstituted so that the heat of the oven does not remove essential moisture. Individual, specialized treatment for various dishes during the reconstituting process varies according to how the meal was originally prepared. This is something to be learned through actual experience.

January 1952 Purchases $225,845,000

Executives' group warns manufacturers that railroads—one of their biggest customers—are caught in "squirrel cage" of rising costs

January 1952 purchases by domestic railroads of all types of materials totaled $225,845,000, compared with $349,555,000 in the first month of 1951, as shown in an accompanying table. Commitments to purchase rolling stock aggregated $49,267,000 in January of the current year, compared with $154,923,000 in January 1951. Purchases from manufacturers dropped to $172,430,000 in this year's first month, compared with the January 1951 total of $287,315,000.

Equipment placed on order last January included 5,338 freight-train cars, 92 passenger-train cars and 102 diesel-electric locomotive units.

The Eastern Railroad Presidents Conference recently warned leading producers of steel products, lumber and fuels that railroads—one of their biggest customers—have been caught in a "squirrel cage" of rising costs. Too-close government regulation, the conference said, has kept railroads from earning revenues that can begin to keep pace with rapidly spiraling costs of doing business. The conference pointed out, for example, that since 1940 the average price of rails, steel plates, track spikes and other steel products has risen 112 per cent, while the railroad charge for hauling these products has been permitted to rise only 78 per cent.

The average price increase of lumber and other forest products, the conference added, has amounted to over 240 per cent since 1939 and railroads, in the same period, have been permitted to increase their charges for carrying these products by only 69 per cent.

The same disparity between cost and income holds true with respect to other materials purchased by railroads, the conference continued. In 1950 railroads bought $323,007,000 worth of coal and $285,712,000 worth of oil and other fuels. In the past twelve years the average prices of these fuels have jumped 135.3 per cent, far outstripping revenue gains allowed the railroads.

While the conference acknowledged that inflationary forces have dictated these price increases in materials and supplies, it said the figures strikingly illustrate the problem presented by increasing costs of operation. The failure of regulatory bodies to allow rail revenues to increase in proportion to higher costs of doing business, the conference emphasized, is threatening the financial stability of one of the biggest customers of industry.

1952 RAILWAY PURCHASES*

	January 1952 (000)	January 1951 (000)
Equipment **	$ 49,267	$154,923
Rail	8,508	7,682
Crossties	9,933	6,495
Other Material	104,722	118,215
Total from Manufacturers	$172,430	$287,315
Fuel	53,415	62,240
Grand Total	$225,845	$349,555

* Subject to revision.
** Amount placed on order.

JANUARY* PURCHASES OF MANUFACTURED GOODS
(Excl. Equipment and Fuel)

Year	Jan. '52 Compared to Other Jans. (000) Amt.	% Change	Month	Jan. '52 Compared to Other Months '51 (000) Amt.	% Change
1946	$ 77,855	+ 58	Feb. '51	$123,177	—
1947	97,962	+ 26	Apr. '51	150,629	— 18
1948	102,136	+ 21	June '51	144,423	— 15
1949	110,271	+ 12	Aug. '51	144,154	— 15
1950	73,861	+ 67	Oct. '51	131,342	— 6
1951	132,392	— 7	Dec. '51	113,213	+ 9
1952	123,163		Jan. '52	123,163	

JANUARY* PURCHASES OF RAIL

Year	Jan. '52 Compared to Other Jans. (000) Amt.	% Change	Month	Jan. '52 Compared to Other Months '51 (000) Amt.	% Change
1946	$5,089	+ 67	Feb. '51	$7,246	+ 17
1947	7,723	+ 10	Apr. '51	8,135	+ 5
1948	7,547	+ 13	June '51	9,441	— 10
1949	7,407	+ 15	Aug. '51	9,224	— 8
1950	8,846	— 4	Oct. '51	8,376	+ 2
1951	7,682	+ 11	Dec. '51	7,948	+ 7
1952	8,508		Jan. '52	8,508	

*Subject to revision.

JANUARY* INVENTORIES OF RAIL

Year	Jan. '52 Compared to Other Jans. (000) Amt.	% Change	Month	Jan. '52 Compared to Other Months '51 (000) Amt.	% Change
Jan. 1, 1946	$24,840	+ 69	Feb. 1, '51	$40,702	+ 3
1947	30,192	+ 39	Apr. 1, '51	41,880	—
1948	32,924	+ 28	June 1, '51	41,246	+ 2
1949	33,243	+ 26	Aug. 1, '51	39,827	+ 5
1950	31,926	+ 31	Oct. 1, '51	42,182	—
1951	38,278	+ 10	Dec. 1, '51	40,878	+ 3
1952	41,981		Jan. 1, '52	41,981	

JANUARY* INVENTORIES OF CROSSTIES

Year	Jan. '52 Compared to Other Jans. (000) Amt.	% Change	Month	Jan. '52 Compared to Other Months '51 (000) Amt.	% Change
Jan. 1, 1946	$72,519	+ 44	Feb. 1, '51	$88,036	+ 18
1947	83,891	+ 24	Apr. 1, '51	87,624	+ 19
1948	92,300	+ 13	June 1, '51	89,287	+ 17
1949	94,256	+ 10	Aug. 1, '51	85,973	+ 21
1950	101,394	+ 3	Oct. 1, '51	88,333	+ 18
1951	83,804	+ 24	Dec. 1, '51	95,842	+ 9
1952	104,090		Jan. 1, '52	104,090	

JANUARY* PURCHASES OF CROSSTIES

Year	Jan. '52 Compared to Other Jans. (000) Amt.	% Change	Month	Jan. '52 Compared to Other Months '51 (000) Amt.	% Change
1946	$5,822	+ 71	Feb. '51	$5,371	+ 85
1947	7,421	+ 34	Apr. '51	7,215	+ 38
1948	5,630	+ 76	June '51	8,245	+ 21
1949	7,473	+ 33	Aug. '51	10,684	— 7
1950	3,618	+175	Oct. '51	8,968	+ 11
1951	6,495	+ 53	Dec. '51	7,664	+ 30
1952	9,933		Jan. '52	9,933	

JANUARY* PURCHASES OF OTHER MATERIAL

Year	Jan. '52 Compared to Other Jans. (000) Amt.	% Change	Month	Jan. '52 Compared to Other Months '51 (000) Amt.	% Change
1946	$ 66,944	+ 56	Feb. '51	$110,560	— 5
1947	82,818	+ 26	Apr. '51	135,279	— 23
1948	88,959	+ 18	June '51	126,737	— 17
1949	95,391	+ 10	Aug. '51	124,246	— 16
1950	61,397	+ 71	Oct. '51	113,998	— 8
1951	118,215	— 11	Dec. '51	97,601	+ 7
1952	104,722		Jan. '52	104,722	

JANUARY* PURCHASES OF FUEL

Year	Jan. '52 Compared to Other Jans. (000) Amt.	% Change	Month	Jan. '52 Compared to Other Months '51 (000) Amt.	% Change
1946	$51,312	+ 4	Feb. '51	$51,592	+ 4
1947	59,602	— 10	Apr. '51	52,573	+ 2
1948	73,468	— 27	June '51	48,668	+ 10
1949	65,368	— 18	Aug. '51	46,710	+ 14
1950	47,063	+ 13	Oct. '51	47,875	+ 12
1951	62,240	— 14	Dec. '51	53,468	—
1952	53,415		Jan. '52	53,415	

JANUARY* TOTAL PURCHASES (Excl. Equip.)

Year	Jan. '52 Compared to Other Jans. (000) Amt.	% Change	Month	Jan. '52 Compared to Other Months '51 (000) Amt.	% Change
1946	$129,167	+ 37	Feb. 51	$174,769	+ 1
1947	157,564	+ 12	Apr. '51	203,202	— 13
1948	175,604	+ 1	June '51	193,091	— 8
1949	175,639	+ 1	Aug. '51	190,864	— 7
1950	120,924	+ 46	Oct. '51	179,217	— 1
1951	194,632	— 9	Dec. '51	166,681	+ 6
1952	176,578		Jan. '52	176,578	

*Subject to revision.

†All total inventory figures taken from I.C.C. statement M-125 for the month indicated.

JANUARY* INVENTORIES OF OTHER MATERIAL

Year	Jan. '52 Compared to Other Jans. (000) Amt.	% Change	Month	Jan. '52 Compared to Other Months '51 (000) Amt.	% Change
Jan. 1, 1946	$435,326	+ 57	Feb. 1, '51	$549,054	+ 24
1947	476,625	+ 43	Apr. 1, '51	603,574	+ 13
1948	560,703	+ 22	June 1, '51	649,055	+ 5
1949	611,864	+ 12	Aug. 1, '51	692,620	— 1
1950	528,399	+ 29	Oct. 1, '51	701,572	— 3
1951	526,865	+ 30	Dec. 1, 51	697,715	— 2
1952	683,203		Jan. 1, '52	683,203	

JANUARY* INVENTORIES OF SCRAP

Year	Jan. '52 Compared to Other Jans. (000) Amt.	% Change	Month	Jan. '52 Compared to Other Months '51 (000) Amt.	% Change
Jan. 1, 1946	$11,258	+ 99	Feb. 1, '51	$20,238	+ 11
1947	12,572	+ 79	Apr. 1, '51	18,775	+ 19
1948	13,225	+ 69	June 1, '51	18,390	+ 22
1949	18,849	+ 19	Aug. 1, '51	16,457	+ 36
1950	14,874	+ 50	Oct. 1, '51	16,550	+ 35
1951	18,260	+ 23	Dec. 1, 51	18,181	+ 23
1952	22,374		Jan. 1, '52	22,374	

JANUARY* INVENTORIES OF FUEL

Year	Jan. '52 Compared to Other Jans. (000) Amt.	% Change	Month	Jan. '52 Compared to Other Months '51 (000) Amt.	% Change
Jan. 1, 1946	$51,816	+ 12	Feb. 1, '51	$59,407	— 3
1947	49,873	+ 16	Apr. 1, '51	62,299	— 7
1948	66,388	— 13	June 1, '51	62,405	— 7
1949	96,900	— 40	Aug. 1, '51	63,422	— 9
1950	48,928	+ 18	Oct. 1, '51	63,193	— 8
1951	58,612	— 1	Dec. 1, 51	54,056	+ 7
1952	57,842		Jan. 1, '52	57,842	

JANUARY* TOTAL INVENTORIES†

Year	Jan. '52 Compared to Other Jans. (000) Amt.	% Change	Month	Jan. '52 Compared to Other Months '51 (000) Amt.	% Change
Jan. 1, 1946	$595,759	+ 53	Feb. 1, '51	$757,437	+ 20
1947	653,153	+ 39	Apr. 1, '51	814,152	+ 12
1948	765,540	+ 19	June 1, '51	860,383	+ 6
1949	855,112	+ 6	Aug. 1, '51	898,299	+ 1
1950	725,521	+ 25	Oct. 1, '51	911,830	—
1951	725,819	+ 25	Dec. 1, '51	906,672	—
1952	909,490		Jan. 1, '52	909,490	

BENCH MARKS AND YARDSTICKS–6

"The standard by which the performance of any railroad man, or anybody else, should be judged is his cheerful and faithful behavior and attention to duty, no matter what the handicaps may be that confront him." So writes a veteran track supervisor on one of the country's very large railroads. He continues:

"A railroad man of supervisory rank finds it hard not to get cynical and to lose his enthusiasm when he sees the property in his charge steadily deteriorate for lack of sufficient manpower and materials to do the job right. We know money is scarce, but is the money there being used effectively?

"Who is supposed to start being courageous and cheerful in the face of adverse conditions — top management or the fellow down the line? A brave example from the top would be helpful, of course, but whether or not a man is going to be dutiful and cheerful, and do the best he can with the means at his disposal, is a decision he can make for himself. The idea of freedom which we are trying to make work in America puts the responsibility for being honest and hopeful and decent on the individual — not on his surroundings, nor on how his superiors and the governmental authorities behave.

"It is a common saying these days that there is a breakdown in our moral pattern, as evidenced by corruption in high places in government. Probably there is some infiltration of this attitude into the ranks of those who do the running and supervising of the railroads, including those who hold the purse strings.

"But a good example is just as powerful in its effect as a bad one — and a man doesn't have to be at or even near the top to set a good example. If all of us who deplore all the bad examples we see would get busy, ourselves, to set another kind of example, we could quickly overwhelm the bad influence of the bad examples.

"The yardstick for anybody's performance is his cheerful and competent performance of his duty, however adverse or discouraging his circumstances. If *everybody* waits for a high standard to imitate, we won't ever have high standards, or any standards at all."

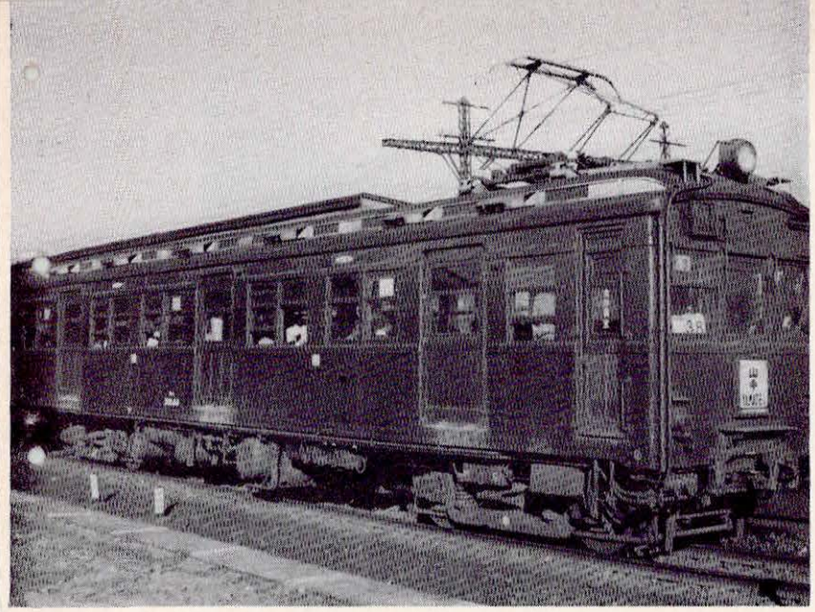


Fig. 1—First of the m.-u. cars which were placed in service in Tokyo in 1926.

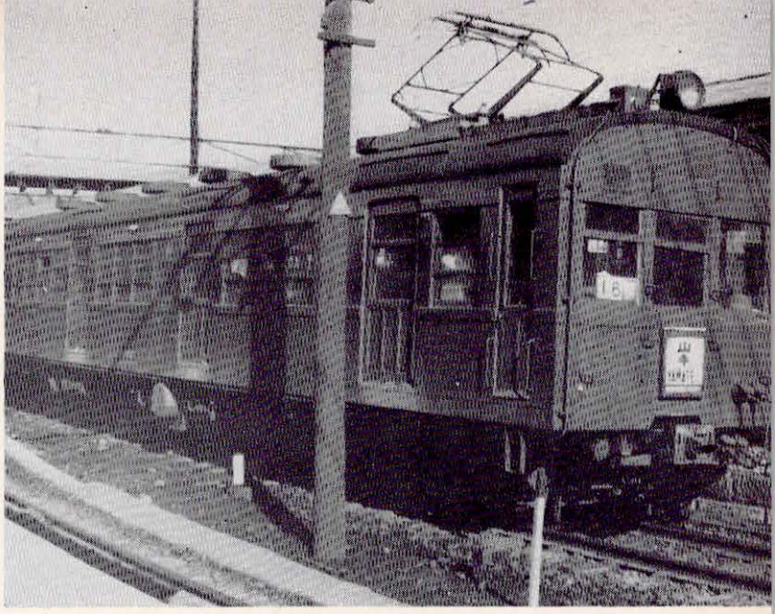


Fig. 2—One of the Rokusan type cars built to replace bomb-damaged equipment.

Japan Gradually Improving Multiple-Unit Equipment

Information received from Japan on multiple-unit electric suburban service in Tokyo and Yokohama indicates that service has been effectively restored by the rebuilding of damaged equipment, and is being gradually improved by the addition of new cars.

The car shown in Fig. 1 is one of about 200 cars with clerestory roof still being used in the Tokyo area. They are the original semisteel type built in 1926. A few have been remodeled and others are transferred to local service as new equipment becomes available. A few years ago, several private railways, operating in the Tokyo area, purchased as scrap a number of these cars which had been damaged in air raids. These were then rebuilt and placed in service on these lines.

The last wooden cars on the main lines serving Tokyo were withdrawn from service about three years ago. They have been replaced by cars of the Rokusan type, one of which is shown in Fig. 2. About 700 of this type were built during the war and in the postwar period. They were built hurriedly to meet a severe car shortage.

On April 24, 1951, as a train of the Rokusan type cars was approaching the Sakuragicho station in Yokohama, the first car suddenly caught fire. Since there were no end doors and the side doors could not be opened by the passengers, nearly 100 passengers were killed. Now these cars are being equipped with end doors and the side doors are fitted with valves under the seats which permit opening them in an emergency.

The car shown in Fig. 3 is one of the standard type built before the war. Materials and fixtures used in its construction are much better than those in the Rokusan type cars.

Fig. 4 shows one of the newest streamline type cars now being used on lines between Tokyo and health resorts in the mountains and at the seashore. The illustration shows a mail and baggage car normally run at the head end of the train.

Fig. 3—Prewar standard all-steel suburban car.

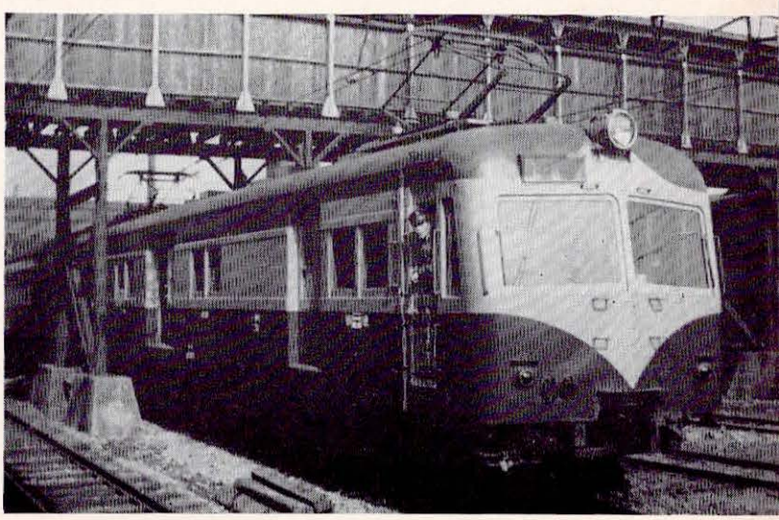


Fig. 4—Most recent type of all-steel car now being placed in main-line service.

New Frisco St. Louis City Ticket Office

A new downtown passenger and ticket office—conveniently located in the business and shopping district—recently has been opened in St. Louis by the St. Louis-San Francisco. The new location is the former drug store in the line's home office building at Ninth and Olive streets.

The interior design is modern—in keeping with current trends—with chartreuse and chocolate Armstrong wall linoleum to harmonize with a grey and maroon Flintkote "Tilex" plastic tile floor. Cove lighting is used, with fluorescent fixtures, extended in irregular curves around the office. The lights are arranged to provide full illumination for every working area.

To the rear of the public office is a private office for the general agent, passenger department. There also are offices for the director of employee clubs and the general agricultural agent, as well as two wash rooms.

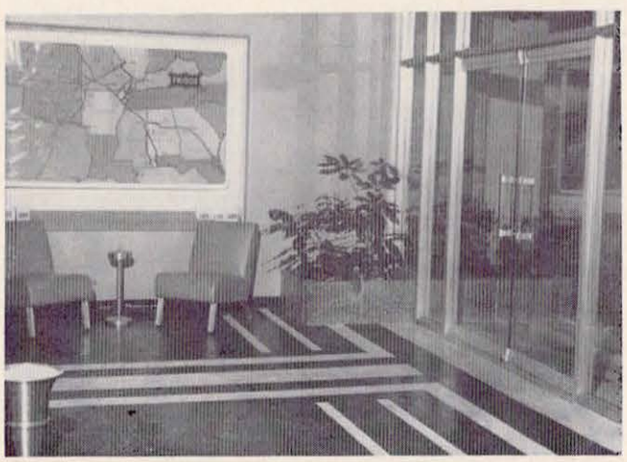
The special steel equipment for the ticket sellers was designed and built to Frisco plans by the General Fireproofing Company. However, standard-sized drawers in steel cabinets were used wherever possible, with specially fitted interiors. The standard steel units were placed in the curved shell of the wood counter, being separated by variously shaped filler units.

The office normally is staffed by a city ticket agent and two ticket sellers in addition to a chief clerk, two passenger representatives and the general agent. However, provision was made, in designing the office, for four selling stations at the counter.

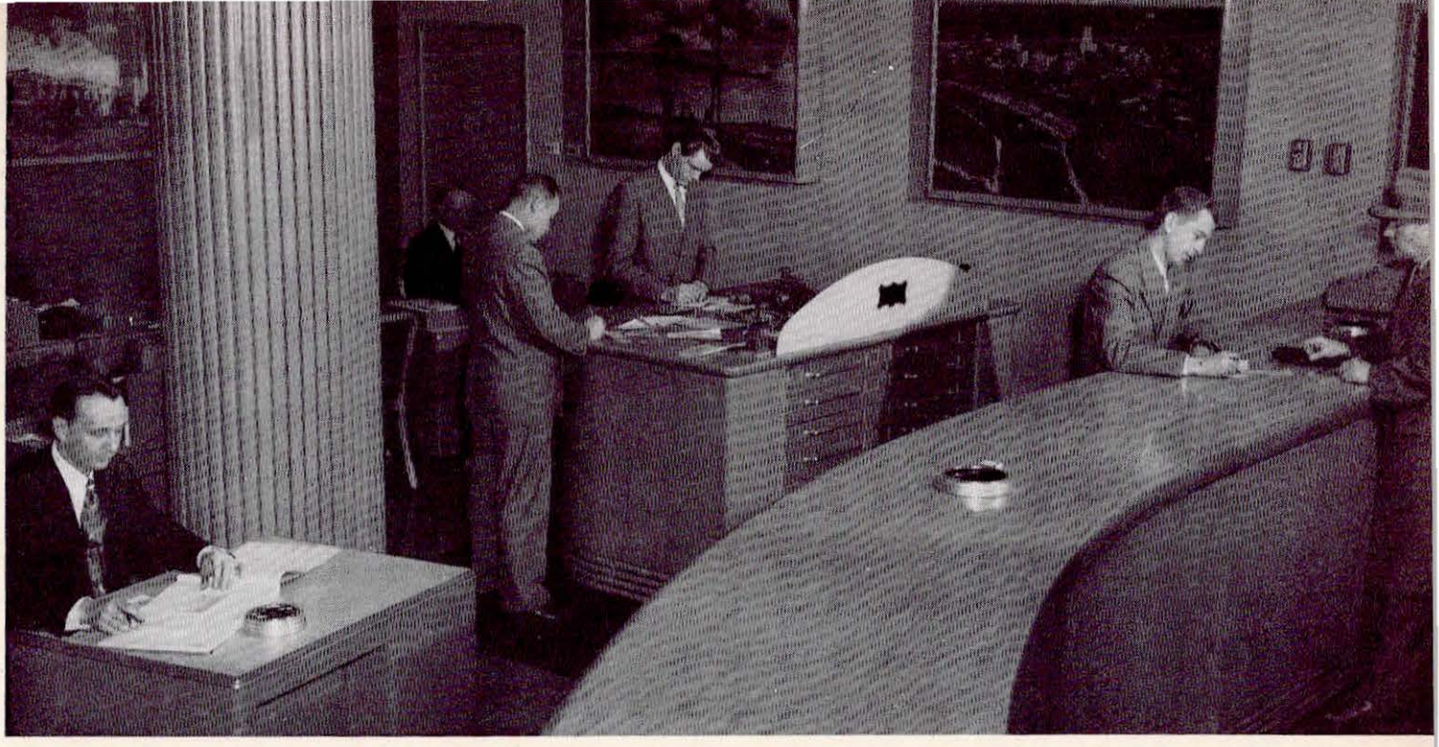
The sellers work from a single ticket stock, each retaining an agent's stub to verify every sale. Responsibility for maintaining and auditing the stock is placed with the city ticket agent. To simplify the handling of cash—as is done in most city offices—each seller is provided with a "bank" which he carries over from day to day for making change.

St. Louis is the most important passenger station on the Frisco system. This new office is its only "downtown" St. Louis sales office (Union Station is about a mile north of the main business district) and replaces a smaller joint office formerly maintained in the Boatman's Bank Building, five blocks away.

From rear of the office, the two principal counter selling positions are visible, with reservation phone between them.

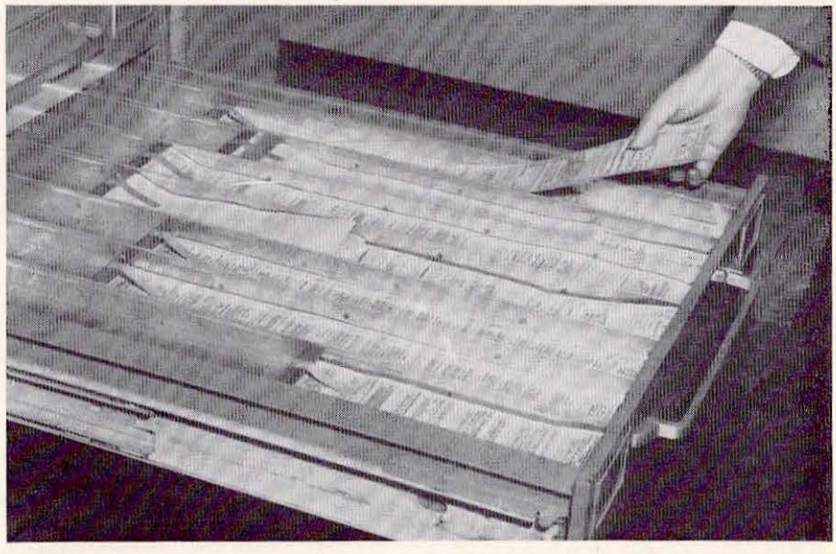


Lobby has a backlighted map of "Friscoland." The linoleum walls and plastic-tiled floor are in harmonious colors.

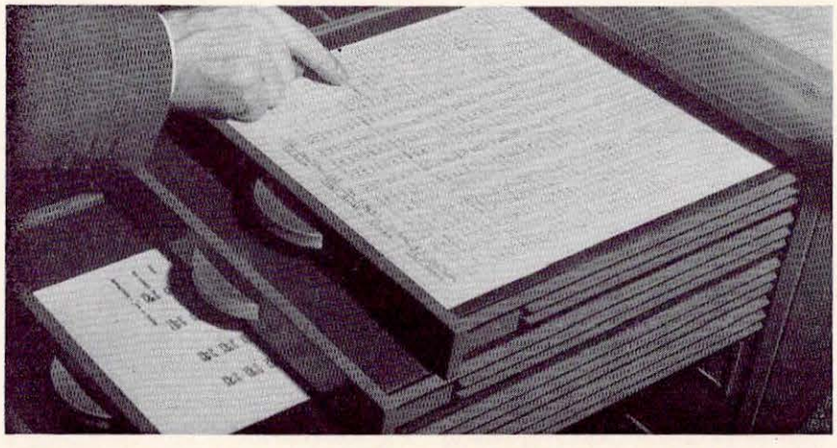


The formica-topped counter is curved. All ticket stock is kept in a cabinet to the rear of the main counter. This cabinet has a work space on top where tickets are prepared.

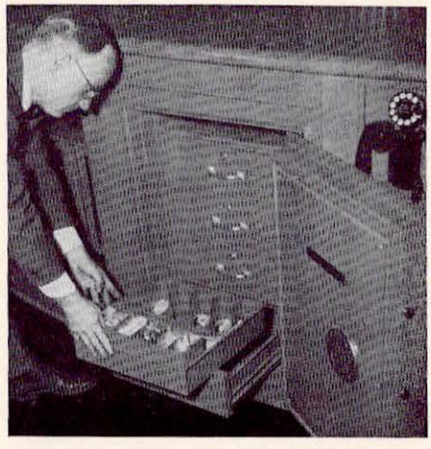
In the ticket cabinet, the top drawer is equipped with spring-actuated vertical tubes for card and Pullman tickets.



The soft tickets are kept in troughs equipped with adjustable clips. Partitions are so arranged that these drawers will hold any size ticket. A single trough will hold 50 single or 25 folded tickets.



Tariff rate cards are kept in ready-reference felt-lined, glass-covered slides at each counter selling position.



Counter safe has four drawers, giving each seller a private, locked drawer.

EQUIPMENT AND SUPPLIES

FREIGHT CARS

8,159 Freight Cars Delivered in March

March deliveries of new freight-train cars for domestic use totaled 8,159, the American Railway Car Institute and the Association of American Railroads have announced jointly. Orders were placed in March for 5,619 new freight cars, the announcement said. February deliveries and orders amounted, respectively, to 7,358 and 6,120.

The backlog of cars on order and undelivered for domestic use aggregated 115,854 units on April 1, the announcement added, compared with a March 1 backlog of 118,900 cars. A breakdown by types of cars ordered and delivered in March, and of cars on order on April 1, appears in the accompanying table.

Type	Ordered Mar. 1952	Delivered Mar. 1952	On Order & Undelivered April 1, 1952
Box—Plain	1,000	2,434	35,183
Box—Auto	0	0	750
Flat	0	312	3,404
Gondola	1,500	1,379	23,368
Hopper	1,950	2,557	35,692
Covered Hopper	100	304	5,016
Refrigerator	1,000	299	4,977
Stock	0	0	500
Tank	50	749	6,163
Caboose	0	75	392
Other	19	50	409
TOTAL	5,619	8,159	115,854
Carbuilders	4,619	5,838	74,921
Railroad Shops	1,000	2,321	40,933

LOCOMOTIVES

The **Canadian National** has ordered four diesel-electric locomotive units from the Canadian Locomotive Company. After delivery, scheduled for next August, the units will be placed in work-train service on the C.N.'s new 147-mi. development line under construction between Sherridon and Lynn Lake in northern Manitoba. When the line is completed, they will be placed in regular service between the two points. Because they will be operated where winter temperatures drop to 60 degrees below zero, the diesels will be equipped with specially designed heaters for maintaining fuel oil in a liquid state and heating engine cabs and circulating-water systems. They also will be fitted with fuel filling pumps to take on fuel from barrels along the right-of-way.

SIGNALING

The **Canadian National** is expanding its interlocking facilities in Zone 4 of the Montreal Terminal incident to installation of four new station tracks. A contract covering this expansion, awarded to the Union Switch & Signal Division of Westinghouse Air Brake Company, includes arranging the present control machine to handle the new facilities and installing style H-2 searchlight signals, M-3 electric switch machines, and associated equipment.

The **Delaware, Lackawanna & Western** is replacing semaphore signals with color-light signals on 25.5 miles of double track between Leicester, N. Y., and North Alexander. Equipment, ordered from the Union Switch & Signal Division of Westinghouse Air Brake Company, includes style R-2 signals, relays, rectifiers, transformers, etc. Field installation will be done by railroad forces.

The **Missouri Pacific** plans to install a traffic control system between Raddle, Ill., and Gale, 40.6 miles. Equipment has been ordered from the General Railway Signal Company.

Three sets of four-indication cab signal apparatus, to be installed on diesel-electric locomotives being built for the **Pennsylvania** by the Baldwin-Lima-Hamilton Corporation, have been ordered from the Union Switch & Signal Division of Westinghouse Air Brake Company.

CAR SURPLUSES, Shortages

Average daily freight car surpluses and shortages for the week ended April 5 were announced by the Association of American Railroads on April 10 as follows:

	Surplus	Shortage
Plain Box	3,295	596
Auto Box	245	15
Total Box	3,540	611
Gondola	547	877
Hopper	1,147	241
Covered Hopper	147	0
Stock	2,587	0
Flat	16	664
Refrigerator	4,868	0
Other	870	5
Total	13,722	2,398

ORGANIZATIONS

The **National Railway Historical Society's** Louisville, Ky., chapter will sponsor a "Farewell to Danville" trip over lines of the Illinois Terminal between St. Louis and Danville, Ill., on April 20. The trip will include that portion of the road's Eastern division which is scheduled for abandonment later in the month.

A 17-car special train will carry some 200 eastern security analysts to the annual meeting of the **National Federation of Financial Analysts Societies,** which is to be held in San Francisco and Los Angeles during the week of May 4. The train will leave Chicago on the Burlington and travel to San Francisco via Denver & Rio Grande Western and Western Pacific. The party will return to Chicago over the Southern Pacific to Los Angeles and New Orleans, and the Illinois Central. Special inspections of railroad facilities are being arranged at Chicago, where the analysts will tour the Belt Railway and visit the LaGrange plant of the Electro-Motive Division at the beginning of the trip, and the I.C.'s Markham yard on the return journey. Other rail inspection trips are being arranged at Denver, Salt Lake City, Los Angeles, Houston and New Orleans.

Dates for the 1952 meeting of the **American Railway Magazine Editors' Association** at Santa Fe, N. M., have been tentatively set for October 20, 21 and 22. The association's spring meeting will be held in Cleveland at the Hotel Cleveland on May 2.

The **Cleveland Car Department Supervisors Association,** organized in December 1950 to promote greater efficiency in railway car handling, has elected the following new officers for the next year: President, A. C. Bender, joint supervisor car inspectors, all lines; first vice-president, E. J. Zepp, general car foreman, Nickel Plate; second vice-president, J. J. Matchulat, foreman car repairs, Pennsylvania; secretary, N. F. Lorenz, car foreman, Nickel Plate; and treasurer, J. C. Novy, car foreman, Erie.

The **Transportation Club of Louisville** will hold its 16th "Perfect Shipping Month Meeting" at the Kentucky Hotel at 6:30 p.m. April 15. H. E. Miles, general sales manager of the Corrugated Box division of the Mengel Company, will discuss "The Importance of Good Containers in Claim Prevention."

The **Richmond (Va.) Traffic Club** will hold its April 23 meeting, designated as "Railroad Night," in the John Marshall Hotel at 6:30 p.m. A. S. Genet, vice-president—traffic of the Chesapeake & Ohio, will introduce the speaker, Senator John W. Bricker, of Ohio.

Richard D. Chase, manager of the transportation department of the Boston Wool Trade Association, will be guest speaker at the regular monthly luncheon of the **Boston General Agents Council,** to be held on April 21 in the Hotel Manger.

The **New York Railroad Club** will hold its first dinner meeting in the Hotel Commodore at 7 p.m. on April 17. The dinner will be preceded by a reception period of about one hour, and, following the dinner, William White, president of the Delaware, Lackawanna & Western, will deliver an address on "Why the Railroads Must Do a Better Public Relations Job."

SUPPLY TRADE

Electro-Motive Opens A "New Ideas" Department

Two veteran members of the Electro-Motive organization have been assigned to look into "post-diesel application of E.-M.D.'s skills and facilities" from the standpoints of engineering and commercial availability.

O. F. Brookmeyer, former general sales manager, and R. M. Dilworth, former chief engineer, will "study ways in which engineering and manufacturing techniques and facilities accumulated in the development of the diesel locomotive may be applied in the development of other products beneficial to American railroads." Mr. Dilworth — who for the past few years has headed the advanced engineering activity of E.-M.D. — is to explore the engineering aspects, and Mr. Brookmeyer the commercial availability aspects.

R. M. Dilworth

Nelson C. Dezendorf, general manager of Electro-Motive and vice-president of the parent General Motors Corporation, in announcing the new program, made it clear that these future developments would not be put in operation until railroad dieselization demand will permit a reduction in current high locomotive manufacture. "It will be several years," he said, "before railroad demand for diesel locomotives is satisfied to the point that any major portion of our manpower and facilities would be diverted to other activities."

O. F. Brookmeyer

Walter N. Fritts

Meantime, as reported on page 133 of last week's *Railway Age*, Walter N. Fritts, assistant general sales manager of the Electro-Motive Division has been appointed general sales manager, to succeed Mr. Brookmeyer. The Eastern region, which has been divided into two new regions, will be headed at New York by G. M. La Riviere, former manager of the St. Louis region, and at Washington, D. C., by R. L. Terrell, assistant manager of the former Eastern region. Frederick W. Walker, district sales manager, Chicago region, has been named manager, St. Louis region.

Frederick W. Walker

Floyd E. Von Ohlen, sales representative, Chicago region, has been appointed sales manager, East Central district, Chicago region.

Before joining Electro-Motive in 1925, Mr. Brookmeyer spent 20 years with the Cleveland, Cincinnati, Chicago & St. Louis (New York Central) ultimately resigning from the position of superintendent of transportation at Indianapolis. While with the railroad, he was active in application of gas-electric rail cars to Big Four service. With E.-M.D. he subsequently directed sale of more than 700 rail cars prior to development of the diesel locomotive. Continuing, he directed sales aspects of the introduction of the new motive power and carried it from virtual infancy to its present state as a fully accepted type of equipment.

Mr. Dilworth joined Electro-Motive in 1926 after having gained considerable experience in construction of gas-electric rail cars with General Electric. During World War I he served the U. S. Army Engineer Corps as a senior civilian engineer and was in charge of the Manila and Subig Bay district in the Philippines. On April 5, 1948, he became engineering assistant to the vice-president of E.-M-D., and in that capacity has been in charge of Electro-Motive's advanced engineering projects that fall outside the scope of normal engineering activities.

G. M. La Riviere

Mr. Fritts began work at Electro-Motive in 1935, starting as a drafts-man. Three years later, he was promoted to junior engineer and six months later became as assistant engineer. In 1943, he became assistant section manager. In 1945, he tranferred to the sales department as sales engineer and in

R. L. Terrell

November of that year became manager of the newly-formed sales engineering section. He became assistant general sales manager in 1949.

Mr. La Riviere, who has been regional manager at St. Louis since 1947, joined E.-M.D. as district sales manager at Washington in 1944. Before coming to Electro-Motive he had served for 21 years with the Atlantic Coast Line and the Canadian National in various traffic department capacities.

Mr. Terrell, who has been assistant regional manager of the New York (Eastern) region since April 1950, joined General Motors Research Laboratory at Detroit as an apprentice in 1936. He left to serve a year and a half as an engine mechanic in the Army Air Forces, returned to General Motors Research, and then joined Electro-Motive as a service engineer in

Floyd E. Von Ohlen

1939. He became an installation engineer, and then entered the Navy in 1942. He returned to E.-M.D. in 1945, becoming district sales manager at Washington in 1946. He was named general parts manager in 1948.

After being graduated from Lehigh University, where he received a B.S. degree in industrial engineering, Mr. Walker served as an instructor in machine design there in 1936-37. He joined Electro-Motive in June 1937 as an apprentice, progressed through the ranks to become application engineer in 1945, and in the following year was appointed manager of statistics and market analysis. He became district sales manager in the Chicago region in 1949.

Mr. Von Ohlen, who was a sales representative for the Chicago region from March 1951 until his recent promotion, joined Electro-Motive in 1942 as a tester in the engine division. In 1944 he was transferred to the service department, where he served as an instructor, and in 1946 became assistant manager of the new locomotive section. In July of the same year, he became manager of this section. In 1950 he became sales engineer, which position he held until his appointment as district sales representative for the Chicago region.

Thomas A. Edison, Inc., has broken ground for a new half-million dollar laboratory at West Orange, N. J. The one-story, reinforced concrete building will provide 7,400 sq. ft. of new space, with a total of 13,000 sq. ft. of space when the new structure is joined with two older buildings that are to be renovated. Construction is to be completed in about 10 months.

Charles L. Day, formerly eastern sales district manager for the technical products division of the **Corning Glass Works,** has been appointed manager of the new sales district office recently opened in Washington, D. C. Mr. Day will act in a liaison capacity between Corning research, engineering and manufacturing groups and various agencies and departments of the federal government.

G. Donald Campbell has been appointed superintendent, and **John A. McMillan** plant engineer, for the recently purchased Shelbyville, Ind., manufacturing plant of the **Pittsburgh Plate Glass Company.** Conversion of the plant to fiber glass production will soon be underway.

Douglas McHenry has been appointed administrative assistant to the vice-president for research and development of the **Portland Cement Association.** He was formerly head of the concrete laboratory section of the U. S. Bureau of Reclamation in Denver.

OBITUARY

Samuel H. Conwell, retired vice-president of the Standard Railway Equipment Manufacturing Company, died April 2 while vacationing in Saratoga, Cal. He had retired January 1, after 44 years' employment with the firm.

CAR SERVICE

I.C.C. Service Order No. 865, which imposes super-demurrage charges running up to $20 per day, has been suspended until May 31—except as to gondola and flat cars. The suspension provisions, embodied in Amendment No. 24, became effective April 9.

ABANDONMENTS

Division 4 of the I.C.C. has **authorized:**

ATLANTIC COAST LINE.—To abandon its branch from Sprague, Ala., to Luverne, approximately 33 miles. Division 4 said it was convinced that neither present nor prospective traffic is sufficient to warrant keeping the line in operation. In 1946 the commission turned down an application for authority to abandon this line.

SPRINGFIELD TERMINAL.— To abandon its entire line, and to abandon operation under trackage rights over a 2.8 mile segment of the Gulf, Mobile & Ohio. The terminal company line, approximately 1.4 miles, is located at Springfield, Ill. The Wabash will acquire a portion of the abandoned line for use as an industrial track.

CONSTRUCTION

Atlantic Coast Line.—These projects have been authorized, at indicated probable costs: Improved drainage between Rocky Mount, N.C., and Selma ($122,404); and track facilities at Ridgewood, Fla. ($38,895).

Baltimore & Ohio.—Contracts have been awarded for work on the following projects at a total cost of $465,000: Toilet facilities, locomotive repair shop, Glenwood, Pa.; industrial spur at Baltimore (Marley Neck); substructure and other work on bridge No. 3, Baltimore; wall and elevator passageway, Camden station, Baltimore; work on bridge No. 235.59, North Point, Pa., and bridges Nos. 17, 30, 80, 95 and 127 at Zimmerman, Ohio, Xenia, Fairview, Austin and Chillicothe.

Chesapeake & Ohio.—A new six-track yard is being constructed at Livonia, Mich., to serve a new plant of the Ford Motor Company on Levan road. Work on three tracks has recently been completed and work has now been started on the remaining three. Altogether there will be 18,052 feet of track in the yard. The work, to cost an estimated $318,000, will be completed next fall.

A $250,000 repair program at the Detroit River ferry slip at Detroit has begun and will be completed in August. A bulkhead wall that supports an embankment and storage track is being replaced and a new coffer dam is being built to protect the foundation of a girder tower. The work is being undertaken by the Jutton Kelly Company, of Detroit.

Chicago, Indianapolis & Louisville.—Nineteen miles of new 115-lb. rail to be laid on the Indianapolis and main lines will release 90 and 100-lb. rail for relay in the South Hammond, Ind., Lafayette and Belt Junction yards. Twenty miles of crushed stone ballast will be installed at various main line points between Lafayette and Greencastle. Deck plate girders of two bridges on the Indianapolis line will be replaced with heavier girders furnished by the United States Steel Corporation. Approximately $150,000 will be spent in reconstructing and repairing other bridges at different locations. Piers and abutments will be solidified by the Intrusion-Prepakt method at a number of points. Searchlight-type signals are being installed between South Hammond and Rensselaer to replace old Federal type signals. Work on this section of the main line will be com-

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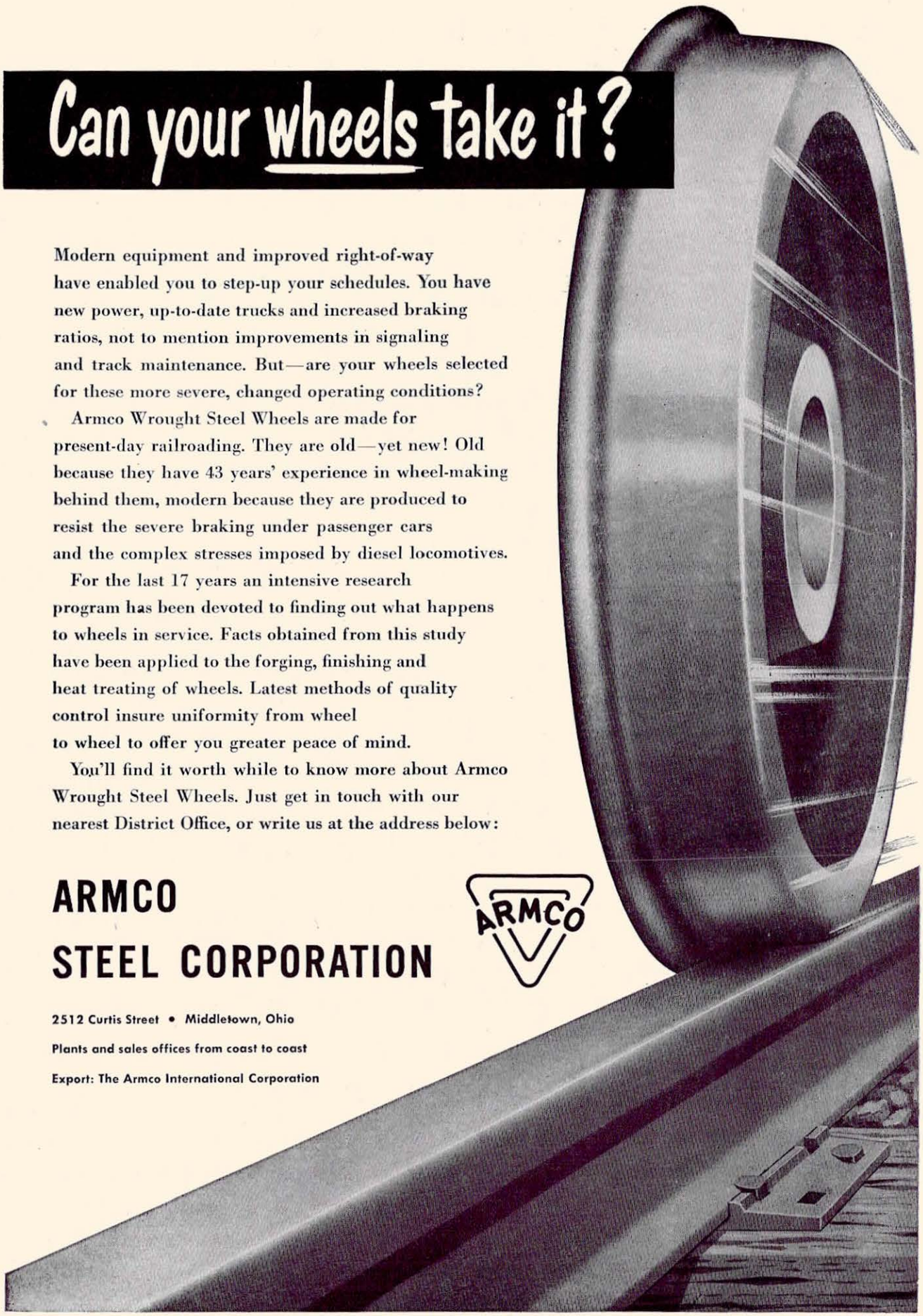

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A MAPLE LEAF OF DIMES—symbolic of the "March of Dimes" fund drive—is admired by Grand Trunk Western Engineman Ernest Weeks, but polio victim Jimmie Larson, 6, of Chicago, seems to have equal admiration for his engineer companion, who handles the "International Limited" on part of its run between Chicago and Montreal. The "silver" maple leaf was made up of contribution to the recently concluded 1952 "March of Dimes" by train crew members on both the Grand Trunk Western and the Canadian National.

pleted this year. New 150-ton track scales are being installed at South Hammond and Wallace Junction. They replace scales of 100-ton capacity. Woven wire fencing is being installed around yard and shop property at Lafayette.

Chicago, Rock Island & Pacific.—The following contracts have been awarded in connection with the main line relocation program between Atlantic, Iowa, and Council Bluffs: Grading, Ace Eblen Construction Company ($1,509,000); pipe culverts, Armco Drainage & Metal Products Co. ($190,500); four concrete boxes, Iowa Bridge Company ($88,200); five concrete boxes, Arcole-Midwest Corporation ($101,500); three concrete boxes, Alexander-Repass ($79,000); four overhead highway bridges, Alexander- Repass ($23,000); four railroad bridges; Arcole-Midwest Corporation ($105,300); four railroad bridges, List & Weatherly Construction Co. ($231,500).

Other projects currently under way include repairs to station platforms, La Salle Street Station, Chicago, Kedmont Manufacturing & Waterproofing Co. ($35,000); remodeling of bridge at Tiskilwa, Ill., Wolfes Jensen ($35,000); two concrete piers for a bridge at Dewitt, Neb., List & Weatherly ($35,000); and remodeling of depot and headquarters building at Rock Island, Ill., C. H. Langman & Son ($97,000). For the diesel servicing shop being built at Silvis, Ill., air, water and oil pipe lines are being installed by Ryan Plumbing & Heating Co. ($27,000) and the electric light and power system by Knott & Mielly ($60,000).

Two piers and three spans of the Kansas (Kaw) River bridge at Topeka are being replaced, following flood damage, at a cost of $240,000. This work, nearing completion by List & Weatherly, was described in a news item in the April 7 *Railway Age*.

Costa Rica.—Subject to approval of this country's legislative assembly, according to a recent issue of foreign Commerce Weekly, a contract has been concluded to construct a railroad line from about 12 miles out of Limon (on the main line to San Jose, the capital), northward about 100 miles along the coast to the southern bank of the Rio Colorado, near the Nicaraguan border. Construction work is to begin within 18 months of approval of the contract, subject to the contracting company's ability to finance it.

Denver & Rio Grande Western.—Diesel servicing facilities are to be constructed on the Craig branch at Phippsburg, Colo., and also at Salina, Utah, on the Marysvale branch. The present yard at Phippsburg will be rearranged and additional trackage installed.

Illinois Terminal.—A new warehouse building will be constructed in St. Louis not far from the road's Central Terminal on 12th boulevard. It will cost about $200,000 and will be built by the Smith-Cooke Construction Company. The warehouse will replace facilities built about 20 years ago as a temporary freight station during construction of the Central Terminal. Since completion of the terminal, the temporary station has been occupied by the Springmeier Shipping Company but the building is no longer adequate for growing operations. The new building will have reinforced concrete platforms and will utilize Transite panels for walls and roof. At the same time a two-story addition will be built on the present office building (owned by the I. T. but occupied by Springmeier) across the street. All the work will be conducted with the tenant continuing to occupy the premises although most loading operations will be transferred to a nearby team track.

Long Island.—The following projects have been authorized at the indicated probable costs: Short arm crossing gates at Charlotte avenue, Hicksville, N. Y., and New South road ($30,000 and $22,000, respectively); and welfare facilities at Hillside-Holban yard ($25,000).

Louisville & Nashville.—The following projects have been authorized and, for the most part, are currently in progress, at the indicated estimated costs: Grade crossing elimination at Ensley, Ala., by construction of an overpass at 19th street ($44,285); rearrangement of trackage in Main street ($97,446); construction of a 5-mile spur to serve a new plant of the General Electric Corporation near Buechel, Ky. ($887,585); construction of a spur to serve Paradise Colleries at Drakesboro, Ky. ($228,970); erection of diesel fuel oil storage facilities at Montgomery, Ala. ($35,200); improvements to west end of freight station at Cincinnati ($141,060); and provision of first aid facilities at South Louisville shops ($26,824).

New York Central.—Contracts have been awarded to: Henry Dubois' Sons Company, New York, for dredging north and south sides, pier 9, Weehawken, N. J.; the American Bridge Division of the United States Steel Company, New York, for manufacture, delivery and erection of structural steel in the Harlem River bridge reconstruction, The Bronx, N. Y.; the Bergen Point Iron Works, Bayonne, N. J., for two hoppers with supports and gates for the north side of the Weehawken pier 9; and the Central Steel Construction Company, Buffalo, N. Y., for structural steel for diesel facilities at Buffalo.

New York, New Haven & Hartford.—The following projects have been authorized, at the indicated estimated costs: Reconstruct Bridge No. 5.65, Hamden, Conn. ($110,000); automatic signals, South Boston, Mass., to Braintree ($95,700); signal station changes, Hartford, Conn., and East Hartford ($86,848); reconstruct Bridge

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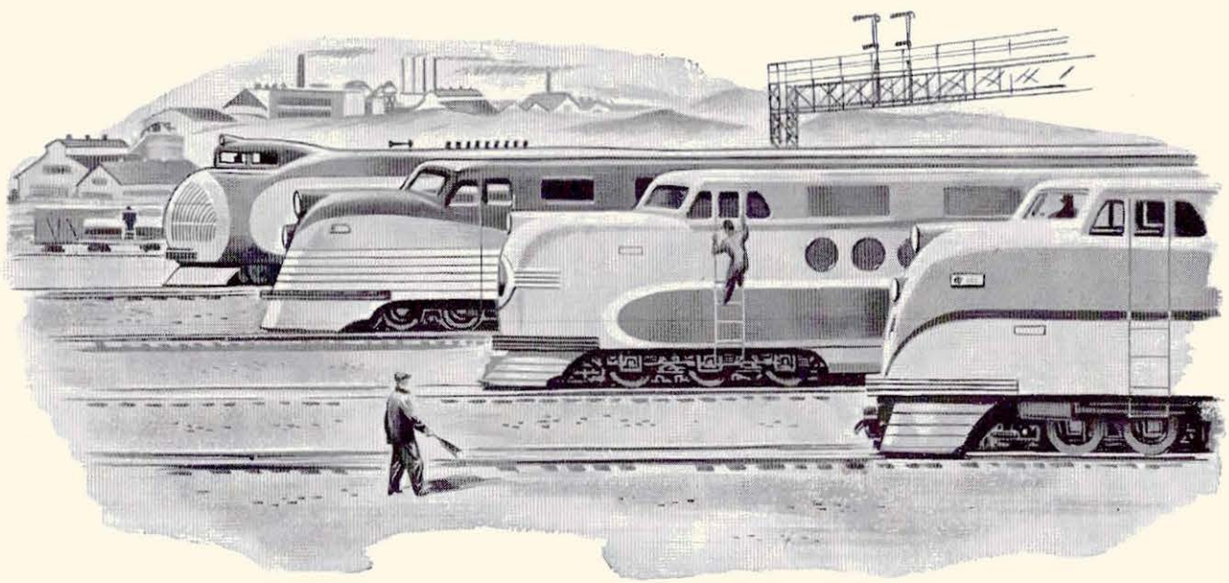

The effective cooling of both jacket water and lubricating oil helps to minimize the number and the cost of overhauls . . . it is an important factor in cutting the *roundhouse* time and increasing the *availability* time of Diesel locomotives. The majority of such locomotives built today are equipped with Harrison radiators and oil coolers.

HARRISON

DIESEL RADIATORS AND OIL COOLERS

HARRISON RADIATOR DIVISION, GENERAL MOTORS CORPORATION, LOCKPORT, N. Y.

No. 12.30, Freetown, Mass. ($39,990); change aspect of distant signals, systemwide ($36,042); abutment alterations, Bridge No. 21.03, Clinton, Mass. ($22,150); and railroad station elevator, New Haven, Conn. ($22,270).

Norfolk & Western.—The following projects have been authorized at the indicated probable costs: Installation of centralized traffic control from Bentonville, Va., to Vardo, Md. ($381,000); change river channel to eliminate two bridges, Nemours, W. Va. ($115,000); construct additional tracks, Front Royal, Va. ($27,300); and purchase of a diesel crawler shovel for systemwide use ($25,000). A contract has been awarded to the Chicago Bridge & Iron Co., Philadelphia, for a steel water-storage tank at Roanoke, Va. ($20,700).

Pennsylvania. — A contract for structural alterations to the Clinton Street passenger station, Trenton, N. J., to permit installation of two moving stairways to serve the eastbound and westbound train platforms, has been awarded to the John W. Thompson Company, Trenton. Estimated cost of the work, which is to be completed on or before next December 15, is $104,459. A contract to furnish and install necessary machinery and equipment for the two mechanical stairs has been awarded to the Otis Elevator Company, Harrison, N. J., at a cost of $71,458.

Reading. — Contracts have been awarded, at indicated estimated costs, to: The Delta Construction Company, Hopewell, N. J., for reconstructing a bridge over the Raritan river at Weston, N. J. ($130,000), and to Jack & Jim Maser, Inc., Browntown, Pa., for constructing roadbed for a spur track to serve the Grace mine at Joanna, Pa. ($110,000).

FINANCIAL

Alleghany Corporation.—*Annual Report.*—This company's net earnings in 1951, exclusive of security transactions, totaled $920,377, compared with $1,244,407 in 1950, according to the recently released annual report. "The decrease," Robert R. Young, chairman, and Allan P. Kirby, president, said in their report to stockholders, "was due chiefly to rising interest on bank debt. . . and, above all, to increased advances and expenses necessary to carry on the struggle against confiscation of your company's important investment in the Missouri Pacific. . . The outlays in the Missouri Pacific case are well worth while in view of the large stake involved."

Alleghany's security transactions in 1951 showed a net loss of $605,036, compared with a net profit of $2,175,996 in the preceding year. Sale of 26,000 shares of M.P. common stock in 1951 yielded proceeds of $85,324 and produced a tax loss of $2,221,972, valuable, the report said, as an offset to future taxable gains. Purpose of the sale of the M.P. shares, Messrs. Young and Kirby said, "was also to establish the fact that these shares continue to have value, to create funds toward the expense of the Missouri Pacific campaign and to make it possible for Alleghany to pay dividends. . . ." An additional 15,000 shares of the issue have been sold since the beginning of this year, they added. Net proceeds of the 1952 M.P. sales amounted to $49,875.

Other security transactions during 1951 included sale of 100,000 Chesapeake & Ohio common shares (net proceeds, $3,582,000); 25,592 Kansas City Southern preferred shares (net proceeds, $1,712,104); and 4,317 New York, Chicago & St. Louis preferred shares (net proceeds, $640,240); and purchase of 4,100 C. & O common shares at a cost of $135,268.

Atlantic Coast Line. — *Appeals F.E.C. Reorganization Decision.*—This company has filed notice of appeal to the United States Court of Appeals for the Fifth Circuit from the order entered in the U. S. District Court for the Southern District of Florida on March 11, disapproving the plan of reorganization certified by the I.C.C. for the Florida East Coast, which plan would have merged the F.E.C. with the A.C.L. The order also directed that on June 1, 1952, F.E.C. reorganization proceedings under Section 77 of the Bankruptcy Act shall be dismissed and the property and records of the F.E.C. be turned over to receivers appointed in the equity receivership, which was commenced in 1931 and superseded in 1941 by proceedings under Section 77, the equity receivership to be reactivated (*Railway Age*, March 17, page 113). The Coast Line appeal will ask the court of appeals to reverse both phases of the district court's order.

Chicago & Western Indiana.—*Relief from Competitive Bidding Requirements.*—Division 4 of the I.C.C. has authorized this road to go ahead and negotiate for private sale of $64,239,000 of new general and collateral trust mortgage bonds. As noted in *Railway Age* April 7, page 139, the road asked competitive bidding relief on $65,000,000 of these bonds. Sale of the bonds would provide the road with funds to retire its consolidated mortgage bonds, due July 1, 1952, and its outstanding first and refunding mortgage bonds, and would further provide approximately $2,500,000 for capital expenditures.

The C. & W. I. orginally planned to issue $52,500,000 of series E first and refunding mortgage bonds. The commission granted competitive bidding relief for this amount. But after talking with financial groups the road decided it would be to its "best interest" to create an entirely new issue of general and collateral trust mortgage bonds totaling $65,000,000.

Meanwhile, the road has not yet applied to the commission for authority to actually issue the new bonds.

Florida East Coast.—*Seeks Tax Refund.*—This company, through its trustees, Scott M. Loftin and John W. Martin, has filed suit in the United States District Court at Jacksonville, Fla., to recover alleged overpayment of federal income and excess profits taxes aggregating $1,103,186, plus interest, for the years 1943 through 1946. The F.E.C. trustees contend that the Bureau of Internal Revenue was at fault in denying to the railroad deductions representing interest accrued upon matured and unpaid interest due on defaulted 5 per cent bonds of the railroad, which has been in receivership or trusteeship since 1931.

Lehigh Valley.—*Stock Option Plan Approved.*—Stockholders of this road, at their annual meeting in Bethlehem, Pa., on April 8, approved a stock option incentive plan which authorizes management to grant stock options to officers and key employees as a method of attracting and retaining competent personnel. The road's executive and finance committee will select eligible participants and determine the number of shares to be allotted to each.

C. A. Major, president, told stockholders the road's condition had been improved during the past year and that all freight and passenger, as well as yard-switching, operations had been fully dieselized since last September 14. Receipt of one diesel tugboat still on order will complete dieselization of the road's New York harbor fleet, he added.

Louisiana Midland. — *Trackage Rights.*—Has applied to the I.C.C. for authority to renew an existing agreement with the Missouri Pacific, covering trackage rights over an 8.9-mile segment between Concordia Junction, La., and Vidalia. The new agreement, effective as of January 1, will carry "some increases in prices due to present conditions." The L.M. would provide no local service along the segment. The same application asked for authority to continue the L.M. lease of the Black River branch of the M.P., from Wildsville, La., to Concordia Junction, 14.7 miles.

Northern Pacific-Oregon-Washington Railroad & Navigation Co. (Union Pacific).—*Joint Use of Rail Line.*—These roads have asked the I.C.C. to approve an arrangement covering joint ownership and joint use of approximately 11 miles of rail line in the McNary dam and reservoir area in Washington State. Most of this trackage is being relocated by the government, to replace existing lines in the flood basin area. There are two segments, one from Attalia, Wash., to Villard, approximately 7.4 miles, and another in the vicinity of Wallula, 3.7

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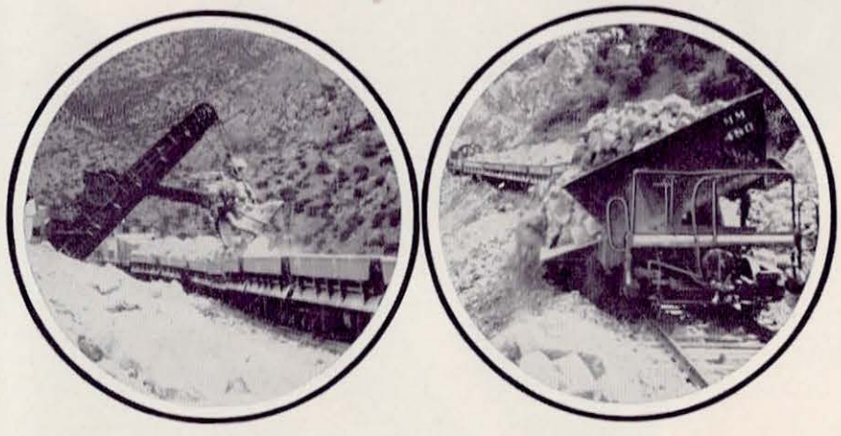
miles. (*Railway Age February 25, page* 68)

Port Angeles Western.—*Reorganization.*—This road and its owner, the Sol Duc Investment Company, have filed a petition for reorganization in the U.S. District Court for the Northern District of Washington.

Pullman, Inc.—*Annual Report.*—Gross revenues of this company and its subsidiaries in 1951 totaled $252,716,469, compared with $175,920,634 in the preceding year, according to the recently released annual report. Net income was $10,269,929, equal to $4.69 a capital share, compared with $9,853,089, equal to $4.49 a share. Unfilled orders for products and services of subsidiary companies amounted to about $375,000,000 at the end of March 1952, Champ Carry, president, said in the report.

The subsidiary Pullman-Standard Car Manufacturing Company constructed 24,241 new freight cars in 1951, nearly three times its 1950 output of 8,830 cars. Pullman-Standard's output of new cars last year was the second largest since 1929, the exception being 1948. Unfilled orders at the close of the year totaled 29,282 units.

Yes, you're seeing DOUBLE



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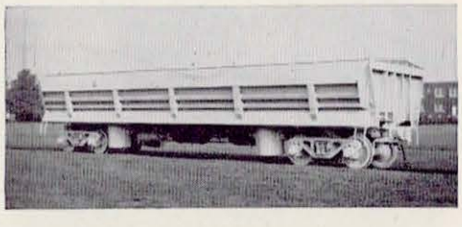

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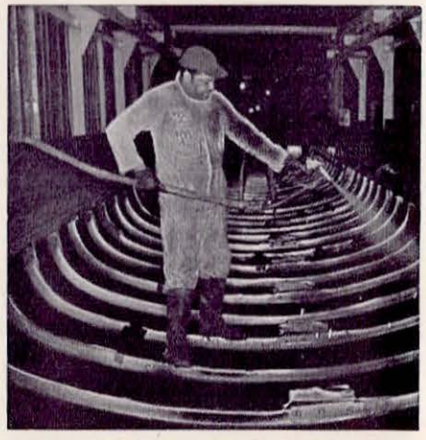
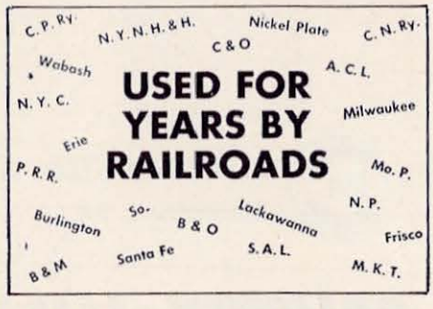


Railway Insulamat being applied to the inverted ceiling of a California Zephyr car.



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Seaboard Air Line.—*Branch Line Construction.*—The I.C.C. has authorized the Atlantic Coast Line to intervene in connection with this road's pending application for authority to construct a 1.9-mile branch near Eastbrook, N. C. The Coast Line will oppose the S.A.L. application. It said the proposed new line would cross A.C.L.'s main line and "invade territory which may properly be deemed as local to the (Coast Line)." (*Railway Age*, March 17, page 113.)

Rockdale, Sandow & Southern.—*Operation and Control.*—The I. C. C. has authorized this road to operate, in interstate commerce, a 6.7-mile line between Marjorie, Tex., and Sandow. The line has previously been operated for intrastate commerce only. Its new function will be to serve a $20,000,000 project of the Aluminum Company of America, to be located at Sandow. The Alcoa facilities will consist of an aluminum reduction plant and steam-electric generating plant; and traffic over the line, with the new plants in operation, is estimated at 280,000 tons annually.

The commission also authorized Alcoa to acquire control of the R. S. & S. The company will purchase all outstanding stock and bonds from the present holder for $215,444. The R. S. & S. connects with the International-Great Northern at Marjorie. For this reason the I. C. C. imposed a restriction on Alcoa's acquiring control of the short line. The I.-G. N. must be given a 10-year option to acquire the rail line from Alcoa.

New Securities

Application has been filed with the I.C.C. by:

ATLANTIC COAST LINE.—To issue and sell $22,000,000 of series B general mortgage bonds. The bonds, with interest at 4¼ per cent, would be dated June 30, 1952, and would mature June 30, 1972. The road expects to pledge $29,700,000 of its general unified mortgage bonds, due June 1, 1964, as security for the new issue. Proceeds from the new bonds, which would be sold to institutional investors without competitive bidding, would be used to retire A.C.L. first consolidated mortgage bonds, due July 1, 1952. As noted in *Railway Age* January 28, page 54, the commission has already granted the road relief from competitive bidding requirements.

Division 4 of the I.C.C. has **authorized:**

CHICAGO, ROCK ISLAND & PACIFIC.—To assume liability for $6,000,000 of series M equipment trust certificates, to finance in part 16 diesel-electric locomotives and 900 freight cars costing an estimated $8,025,074 (*Railway Age*, February 25, page 72.) Division 4 approved sale of the certificates for 99.071, with interest at 2¾ per cent—the bid of Salomon Bros. & Hutzler—which will make the average annual cost of the proceeds to the applicant approximately 2.9 per cent. The certificates, dated April 1, will mature in 30 semiannual installments of $200,000 each, beginning October 1, 1952. They were reoffered to the public at prices yielding from 2 to 2.95 per cent, according to maturity.

DONORA SOUTHERN.—To issue notes aggregating $441,500, payable on demand, to its parent company—United States Steel Corporation. Proceeds from the notes will be used principally to pay for additions and betterments from February 1, 1952, through December 31, 1952 (*Railway Age*, March 17, page 114).

UNION (Pittsburgh).—To issue an unsecured promissory note of $925,000 to the United States Steel Corporation, proceeds from which will be used to finance nine diesel-electric switching locomotives costing an estimated $955,719. The note will bear interest at 3¼ per cent. This is the second of three notes which this road expects to issue to the steel corporation, its parent company, in connection with new equipment acquisition. The road is acquiring 12 locomotives and 500 gondola cars at an estimated total cost of $4,061,910 (*Railway Age*, February 11, page 82).

Security Price Averages

	Apr. 8	Prev. Week	Last Year
Average price of 20 representative railway stocks	59.62	60.40	55.37
Average price of 20 representative railway bonds	93.29	93.21	96.33

Dividends Declared

CLEVELAND, CINCINNATI, CHICAGO & ST. LOUIS.—5% preferred, $1.25, quarterly, payable April 30 to holders of record April 11.

LOUISVILLE & NASHVILLE.—$1, quarterly, payable June 12 to holders of record May 1.

PIEDMONT & NORTHERN.—75¢, quarterly payable April 21 to holders of record April 5.

WATERLOO, CEDAR FALLS & NORTHERN.—common, 17½¢, payable April 17 and July 17 to holders of record April 3 and July 3.

WESTERN PACIFIC. — common, 75¢, payable May 15 to holders of record May 1; 5% preferred $1.25, quarterly, payable May 15, August 15, November 17 and February 16, 1953, to holders of record May 1, August 1, November 3 and February 2, 1953.

RAILWAY OFFICERS

EXECUTIVE

Charles L. Franklin, general manager of the Second district of the CHICAGO, ROCK ISLAND & PACIFIC at El Reno, Okla., has been appointed vice-president, operations, at the same point. Mr. Franklin came to the Rock Island in 1937 as trainmaster at Cedar Rapids, Iowa, after having been with

Charles L. Franklin

the Chicago, Burlington & Quincy at Centralia, Ill. He later became superintendent of the Chicago division at Blue Island, Ill., and subsequently of the Rock Island division. In 1943 he was appointed general superintendent of the former Third district at El Reno, and later served as general manager both at Chicago and Kansas City.

Claud D. Cotten, Jr., assistant to vice-president (operations) of the BIRMINGHAM SOUTHERN, has been elected vice-president (operations), with headquarters as before at Fairfield, Ala., succeeding **H. J. Wurtele,** who retired from that position on April 1. Mr. Wurtele will continue to serve the road in an advisory capacity. Mr. Cotten, a native of Birmingham, was

Claud D. Cotten, Jr.

graduated from Georgia Institute of Technology (B.S. in M.E., 1935) and was employed by the Tennessee Coal, Iron & Railroad Co. He joined the Birmingham Southern in 1936 as a mechanical engineer. After World War II service overseas, Mr. Cotten returned to the railroad in 1945 as master mechanic, advancing to assistant to vice-president on January 1, 1950.

H. J. Wurtele

Mr. Wurtele was born on January 8, 1884, at Louisville, Ky., and was graduated from the University of Kentucky (B.C.E., 1904). He was employed by the Tennessee Coal, Iron & Railroad Co. in 1907, leaving in 1909 to join the Birmingham Southern. He advanced through several positions to become general superintendent in 1935 and vice-president in 1937.

OPERATING

As *Railway Age* reported March 31, **J. T. Alexander** has been appointed superintendent, Nashville terminals, of the LOUISVILLE & NASHVILLE and the

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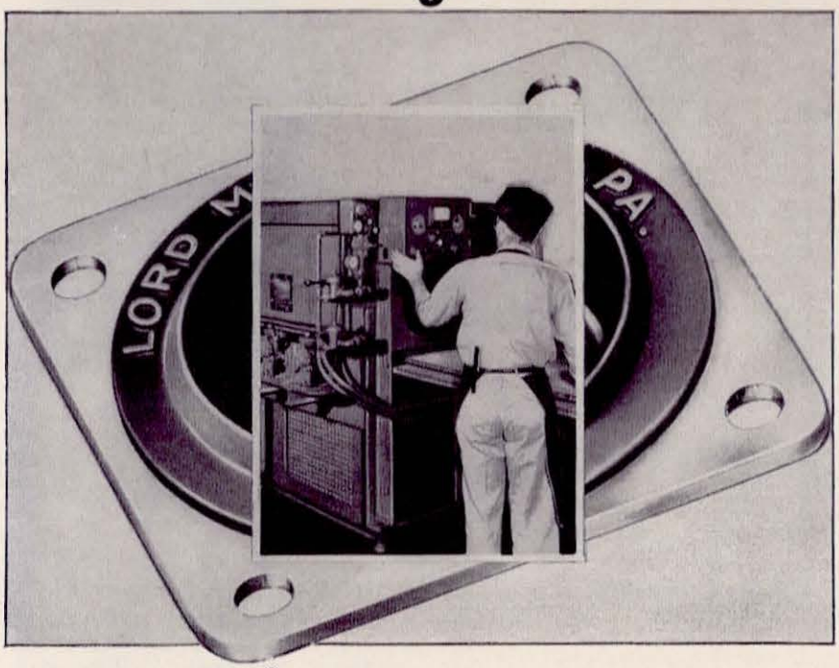

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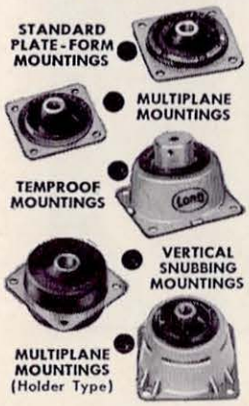

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Nashville, Chattanooga & St. Louis. Mr. Alexander was first employed by the L. & N. in 1922 as a crew caller. He subsequently served as clerk, yardmaster, and assistant trainmaster at several points on the Eastern Kentucky division, until he was transferred to the Cincinnati division in 1945. He was promoted to trainmaster of the Birmingham division in 1948. He was appointed assistant superintendent of the Cincinnati division in 1951 and was serving in this position at the time of his recent promotion.

The Missouri Pacific has announced the following operating department appointments and transfers: **F. E. Fletcher,** appointed trainmaster, Central Kansas division at Osawatomie, Kan., succeeding **F. R. Malott,** promoted; **E. J. Drimmel,** transferred as trainmaster to the River, Lexington and Marshall subdivisions, succeeding Mr. Fletcher; **E. M. Bishop,** transferred as trainmaster to the Sedalia subdivision, succeeding Mr. Drimmel; and **W. H. Shideler,** transferred as trainmaster to the St. Louis, Glencoe and Bagnell subdivisions, succeeding Mr. Bishop. The latter three men will have headquarters at Jefferson City, Mo. **C. E. Gudgell** has been appointed superintendent-agent of the subsidiary New Orleans & Lower Coast, at Algiers, La., succeeding Mr. Shideler. **V. G. Dyer** has been appointed master of trains and track for the subsidiary Missouri-Illinois, at Bonne Terre, Mo., succeeding Mr. Gudgell.

John J. McNally, trainmaster for the Western Pacific at Stockton, Cal., has been appointed assistant superintendent, Western division, at Sacramento. **L. A. Henry,** terminal trainmaster at Stockton, succeeds Mr. McNally, while **Leroy Foster,** trainmaster at Sacramento, succeeds Mr. Henry. **C. C. Eldridge,** assistant trainmaster at Oakland, Cal., has been named trainmaster at Salt Lake City, and is succeeded by **G. H. Evans. L. D. Michelson,** trainmaster at Salt Lake City, has been transferred to Keddie, Cal., succeeding Mr. Evans.

As reported in *Railway Age* February 25, **H. G. Dennis,** district maintenance engineer of the Chicago, Rock Island & Pacific, has been appointed superintendent of the Panhandle division at Liberal, Kan. Mr. Dennis started his railroad career with the Rock Island in 1924. Until 1942 he held several positions in an engineering capacity. At that time he joined the military railway service, in which he rose to the rank of lieutenant colonel. In 1945 he returned to the Rock Island as district maintenance engineer at Kansas City, Mo. His recent promotion was from that position.

R. C. Williams, assistant general manager of the Southern district of the Missouri Pacific, has been appointed general manager of the district, suc-

ceeding the late **C. A. Fink,** whose death was reported in *Railway Age* April 7. **Marvin L. Smith,** assistant general superintendent of transportation at St. Louis, succeeds Mr. Williams, while **W. H. Bailey,** superintendent of the Omaha and Northern Kansas divisions, succeeds Mr. Smith. **D. E. Walker,** assistant superintendent of the Colorado division, has been promoted to superintendent of the Omaha and Northern Kansas divisions, succeeding Mr. Bailey, and is in turn succeeded by **J. A. Austin,** trainmaster on the Arkansas division. Career sketches and photographs of Messrs. Williams, Smith and Bailey appeared in *Railway Age* February 25, February 18 and February 11, respectively.

O. W. Limestall, general superintendent transportation for the CHICAGO, ROCK ISLAND & PACIFIC at Chicago, has been appointed general manager at El Reno, Okla. Mr. Limestall began his railroad service with the Illinois Terminal as telegrapher in 1918. From 1920 to 1922 he served as telegrapher, agent and dispatcher for the Missouri Pacific, and after a short "encore" as telegrapher for the I. T., returned to his

O. W. Limestall

former position with the M.P. in 1923. In 1927 he went with the Toledo, Peoria & Western as dispatcher, becoming chief dispatcher, assistant superintendent and superintendent. He joined the Rock Island in 1936 as trainmaster, and came up through the operating department, being appointed general manager at Des Moines, Iowa, in 1945. He was appointed general superintendent transportation in 1949.

W. T. Bullard has been appointed trainmaster of the Columbia district of the ATLANTIC COAST LINE at Florence, S.C., and **W. R. Price, Jr.,** has been appointed terminal trainmaster there.

As *Railway Age* announced March 3, **N. L. Waterman** has been appointed chief of yard and terminal operations of the CHICAGO & NORTH WESTERN at Chicago. Mr. Waterman began his career with the North Western in 1908 as a caller in the California Avenue yards in Chicago. In 1923 he was appointed yardmaster there, having served in various positions in the Chicago territory as demurrage clerk, yard clerk, and switchman. In 1928 he became trainmaster of the Chicago

N. L. Waterman

freight terminal. He was appointed assistant superintendent of freight terminals in 1934 and superintendent in 1937. He became superintendent of the Wisconsin division in 1948, and received his recent promotion while serving in that capacity.

As reported by *Railway Age* March 24, **E. L. Crimmen,** general superintendent of the MINNEAPOLIS & ST. LOUIS, has been appointed assistant general manager, and is succeeded by **F. B. Clark,** assistant general superintendent. Mr. Crimmen began his

E. L. Crimmen

railroad career with the Chicago & North Western as a telegrapher. His service with the M.&St.L. included positions as telegrapher, chief dispatcher, trainmaster, assistant superintendent and assistant general superintendent. He was appointed general superintendent transportation in 1941.

Mr. Clark began service with the M.&St.L. in 1918 as section laborer. He became section foreman and assistant supervisor, before serving as supervisor of track at several points. In 1944 he was appointed superintendent of the Railway Transfer Company and in 1947 was named assistant general superintendent of the railway.

As announced by *Railway Age,* March 24, **John S. Reed** has been appointed superintendent of the Missouri division of the ATCHISON, TOPEKA & SANTA FE at Marceline, Mo. Mr. Reed began his railroad career in 1939 with the Santa Fe after being graduated from Yale University, that same year. In 1940 he enlisted in the Navy and was released in 1945 with the rank of lieutenant commander. He returned to the Santa Fe in 1946 as special representative of general superintendent of transportation at Chicago, and was promoted to transportation inspector at Amarillo, Tex., in 1948. The following year he became trainmaster at Slaton, Tex., and was transferred to the Colorado division in 1951. He remained on that division until his current appointment.

TRAFFIC

William Jardine, whose appointment as general western freight agent of the SOUTHERN, at Chicago, was announced by *Railway Age* March 10, page 88, entered the service of the Southern as a secretary in the freight traffic department at Washington in 1920. He became secretary to the vice-president in charge of traffic in 1927, was subsequently promoted to chief clerk in the office of general freight traffic manager, and in 1938 was appointed district freight agent. In 1943 he was named assistant general freight agent, becoming general agent in 1946. On January 1, this year, he was appointed assistant general western freight agent at Chicago.

J. Lawrence Chapman, general agent of the ERIE at Detroit, has been transferred to Columbus, Ohio, succeeding **L. J. Slack,** who has been promoted to industrial commissioner at Cleveland. **Louis C. Williams,** traffic assistant in the research department at Cleveland, has been promoted to general agent at Detroit, succeeding Mr. Chapman.

K. H. Ott, chief clerk in the general passenger agent's office, CANADIAN PACIFIC, at Montreal, has been appointed general agent at Halifax, N. S., succeeding **A. C. MacDonald,** who retired on March 31, after 42 years of railway service.

Marc F. Sanderson, assistant general freight agent of the SOUTHERN SYSTEM, has been promoted to assistant freight traffic manager, with headquarters remaining at Memphis, Tenn. Mr. Sanderson was born on July 9, 1892, at New Albany, Ind., and entered the service of the Southern as a secretary at Memphis in 1912. Since that time he has held positions at various points, becoming district freight agent at Memphis in December 1936, division freight

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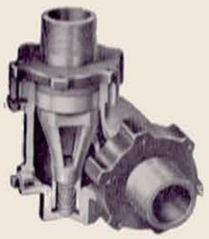
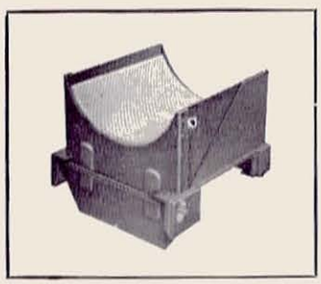
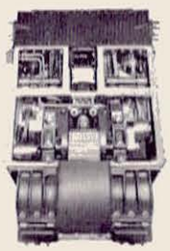


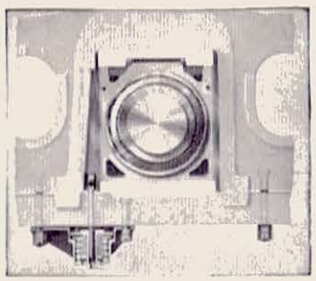
Sleeve Joints



Driving Box Lubricators



The Locomotive Booster



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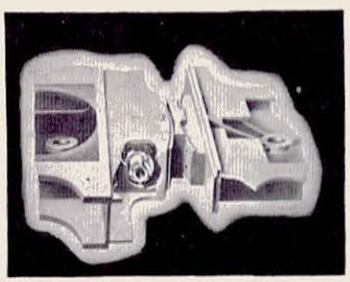
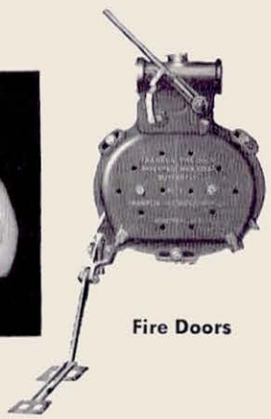


Radial Buffers



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agent in October 1939 and assistant general freight agent in January 1944.

D. T. McMahon has been appointed industrial agent of the KANSAS CITY SOUTHERN at Kansas City, Mo.

I. O. Lawrenz, chief clerk in the freight traffic manager's office of the CHICAGO & NORTH WESTERN, has been appointed assistant general freight agent. **W. R. Tueffel,** chief clerk in the general traffic manager's office, has been appointed chief of tariff bureau. Both men will remain in Chicago.

Irving C. Lawson, chief clerk in the traffic vice-president's office of the NORTHERN PACIFIC at St. Paul, has been appointed assistant general freight agent, succeeding **E. V. Hunt,** who has retired.

C. J. McDonald, general freight agent for the CHESAPEAKE & OHIO at Detroit, has been appointed assistant freight traffic manager at the same point. **Jack Harms,** chief clerk for the assistant general freight agent, has been named freight service representative, with headquarters at Detroit, as before.

Charles H. Clark has been appointed western traffic manager for the DELAWARE & HUDSON at Chicago.

E. D. Mays, assistant freight traffic manager of the SEABOARD AIR LINE, has been appointed executive general agent for freight traffic, with headquarters as before at Tampa, Fla.

ENGINEERING AND SIGNALING

Archibald D. Duffie, assistant designing engineer of the NEW YORK CENTRAL, has been appointed designing engineer, with headquarters as before at New York, succeeding **Thomas J. Jaynes,** deceased.

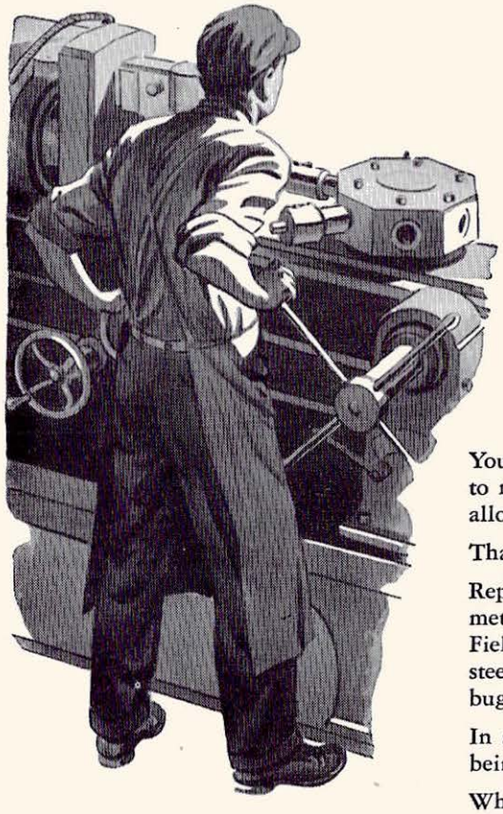
Lionel E. Peyser, architect for the SOUTHERN PACIFIC at San Francisco, has retired after 35 years of service with that road. His railroad service began in 1917 as draftsman for the S.P. In his subsequent career he held positions as designer, assistant architect, and principal assistant architect. He was appointed chief architect in 1947.

William F. Meaney has been appointed architect for the SOUTHERN PACIFIC at San Francisco, succeeding **L. E. Peyser,** who has retired. **John R. Oyarzo** succeeds Mr. Meaney as principal assistant architect.

SPECIAL

Clara L. K. Holmes, head of the women's division of the CANADIAN PACIFIC's department of public relations, has been appointed special publicity representative, and will act in an advisory capacity with the department of public relations.

a few words about alloy steels



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2. Remarkable adhesion—no primer required.
3. Outstanding abrasion resistance
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5. Exceptional outdoor durability

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M. M. DesChamps, chief of property protection of the ATLANTIC COAST LINE at Wilmington, N. C., has been appointed also chief of property protection of the CHARLESTON & WESTERN CAROLINA.

D. P. Russell, supervisor of safety, loss and damage prevention of the New Brunswick district of the CANADIAN PACIFIC at St. John, N. B., has been transferred to Montreal.

J. J. Wieler, land settlement representative for the CANADIAN NATIONAL at Winnipeg, has been appointed district superintendent, department of colonization and agriculture, at Saskatoon, Sask.

H. E. Tessier, who has been in public relations work with the CANADIAN PACIFIC for 28 years, has been appointed public relations officer at Quebec City, succeeding the late **Jean Marchand,** whose death was reported in *Railway Age* March 17.

Ray J. Burgess, trainmaster of the SOUTHERN at Hattiesburg, Miss., has been appointed assistant to personnel officer at Washington, D. C.

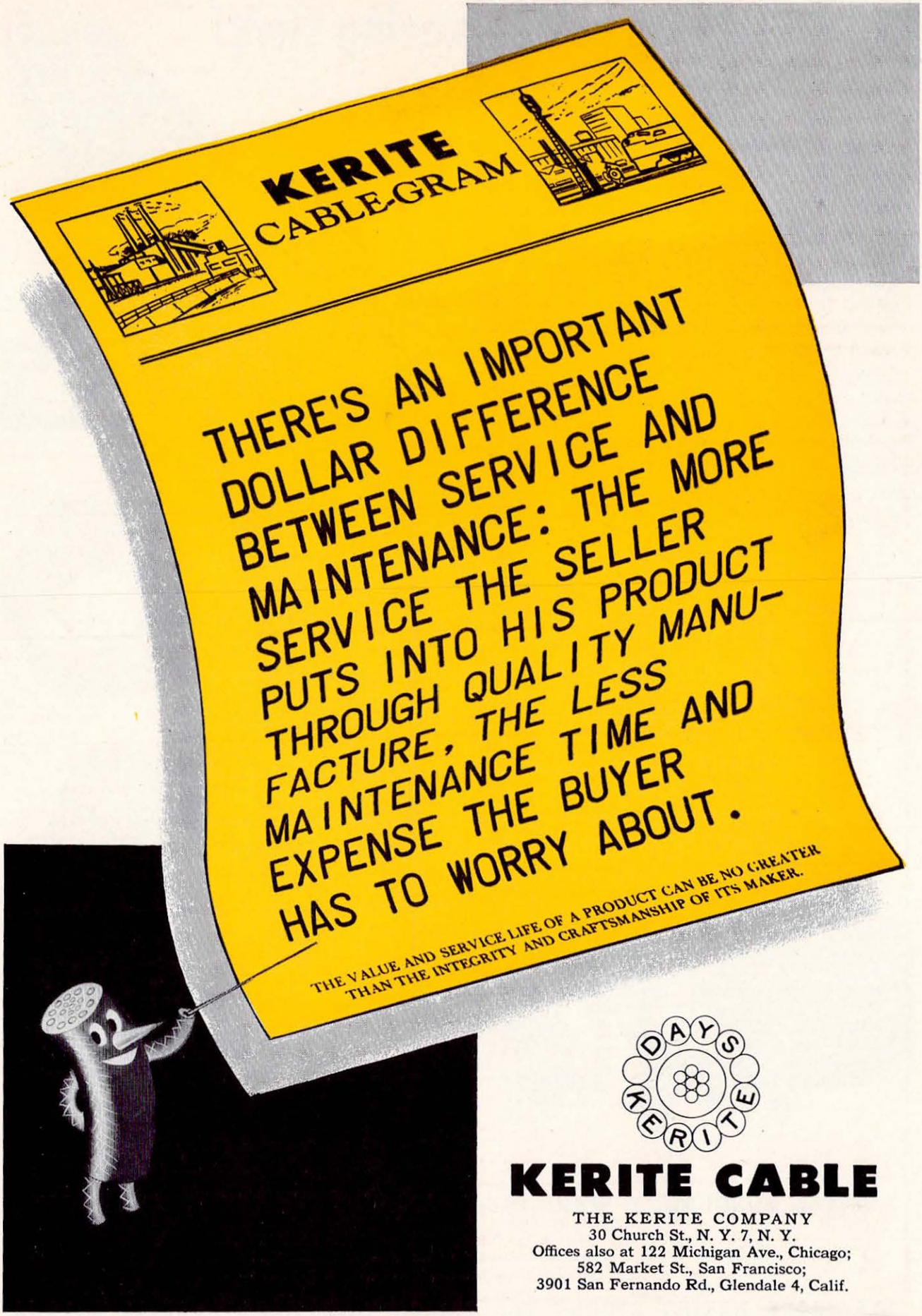
OBITUARY

Kenneth F. Stone, 48, general counsel of the NEW YORK CENTRAL at New York, died on April 5. Mr. Stone was born at Chippewa Falls, Wis., in 1904 and was graduated from Lawrence College (1925) and the University of Michigan Law School (1931).

Kenneth F. Stone

He joined the N.Y.C. in 1931 as an attorney at Detroit, transferring to New York in 1947. He was appointed assistant general solicitor in 1948 and assistant general counsel in 1949. In December 1950 Mr. Stone was appointed acting general counsel and in March 1951 became general counsel.

John Dickinson, vice-president-general counsel of the PENNSYLVANIA since June 1946, died in Johns Hopkins Hospital, Baltimore, on April 9. Mr. Dickinson was 58 years old.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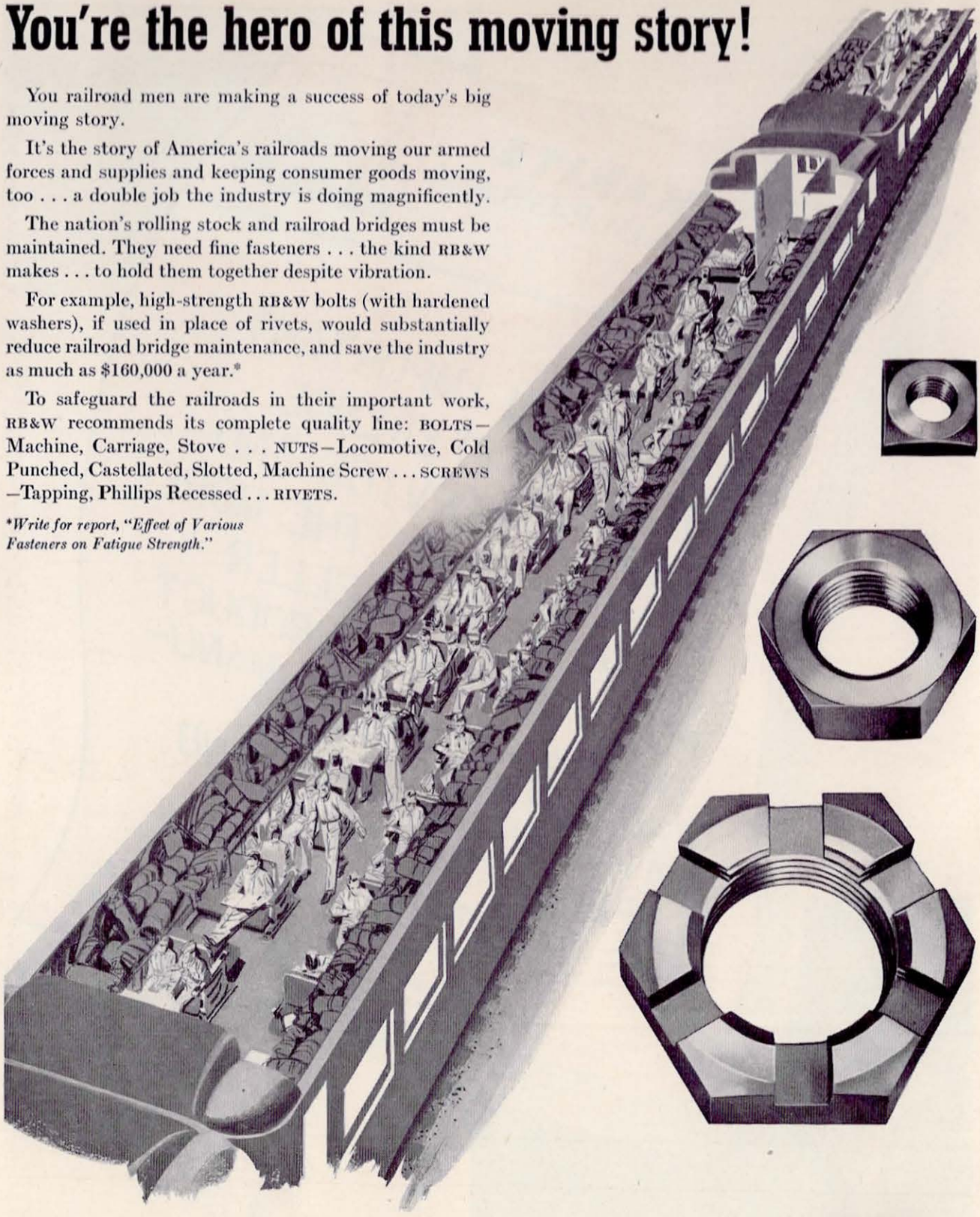

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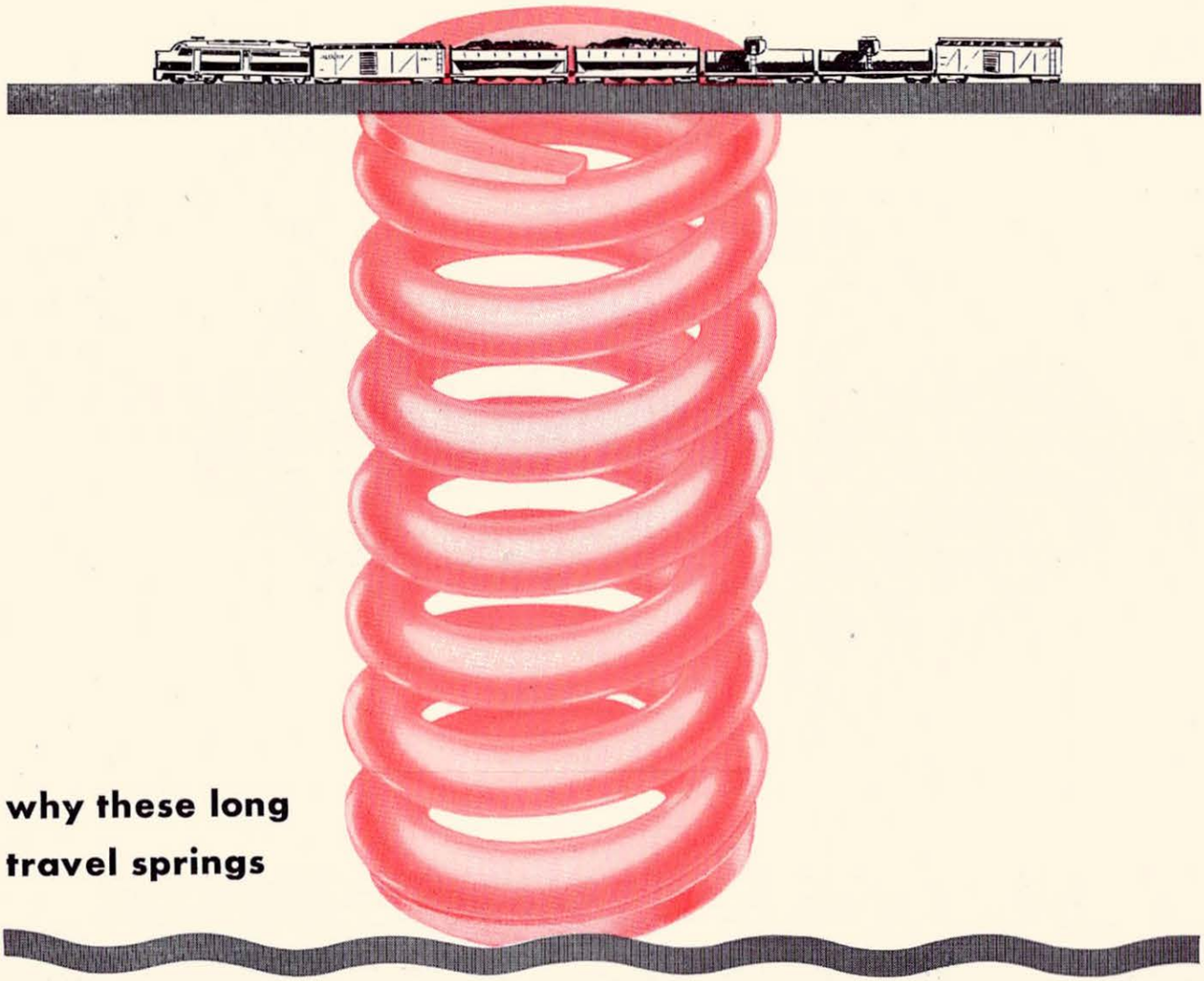

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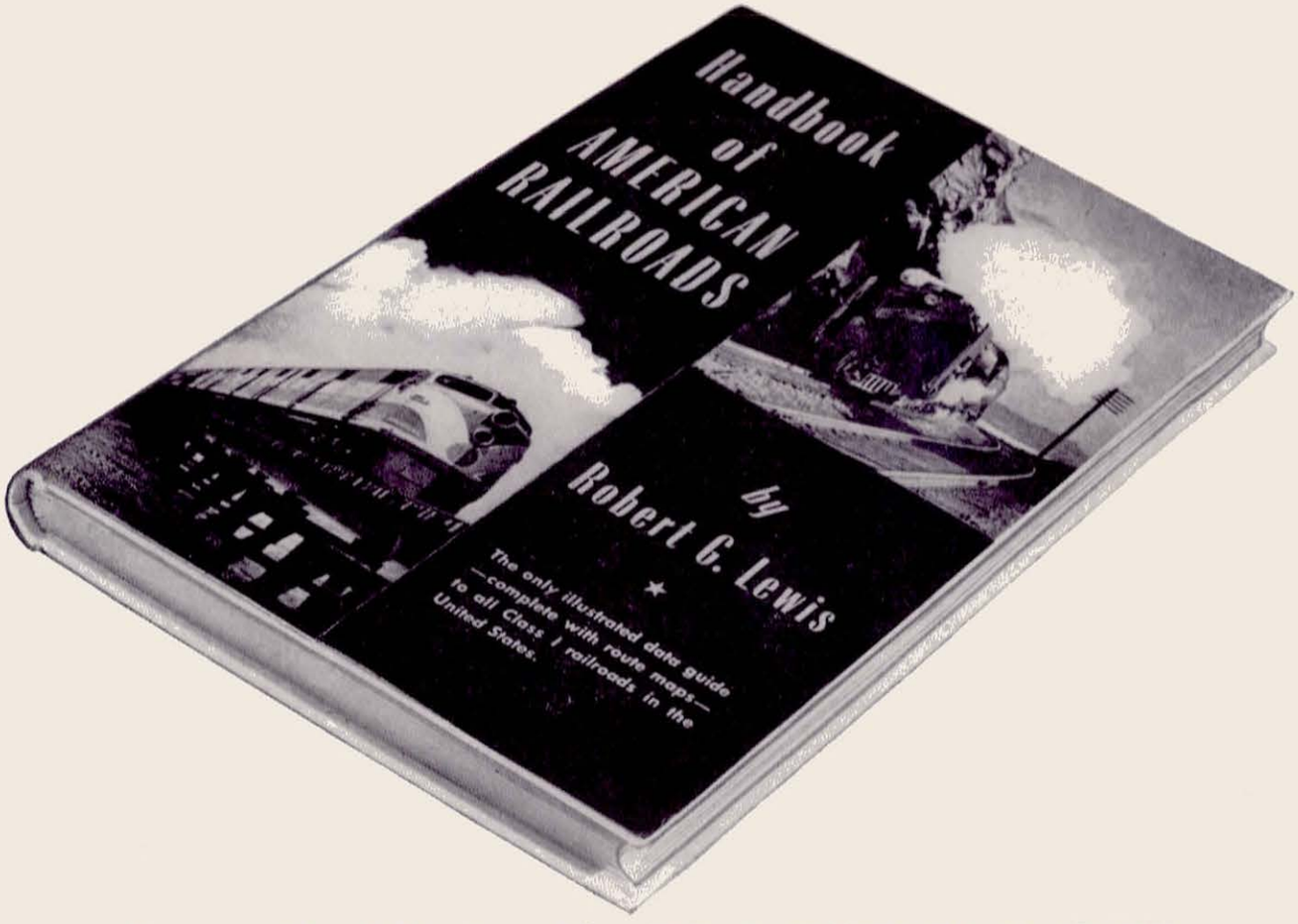
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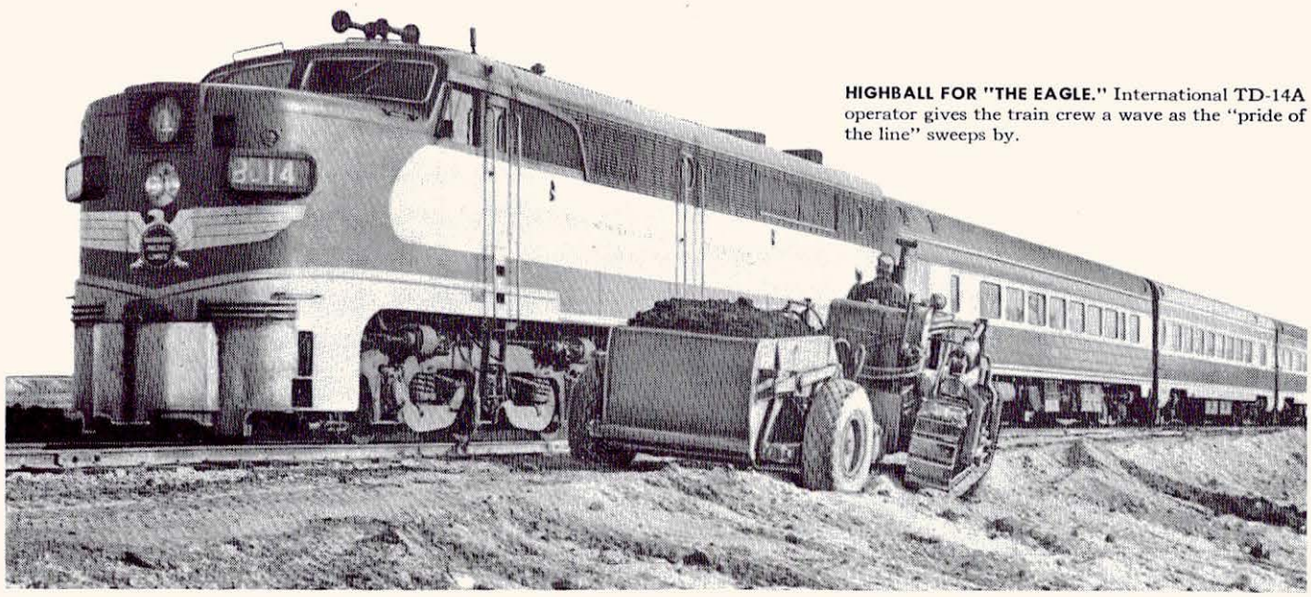

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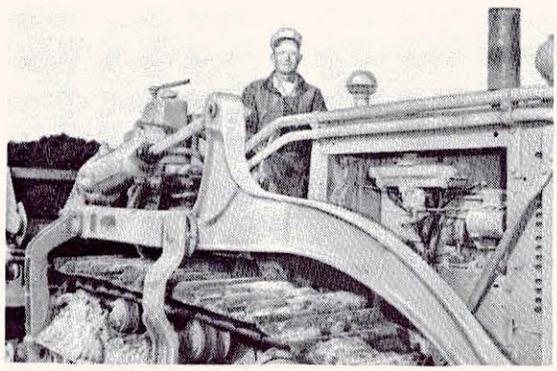
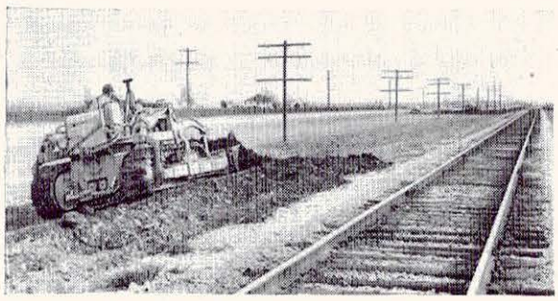
International power helps the Missouri Pacific deliver a smoother ride for passengers and freight in MP's continuous program of line improvements and year-round maintenance



"EASY RIDING TRACTOR," says operator C. J. Miller.



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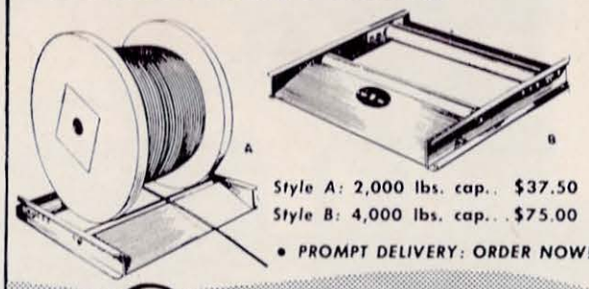

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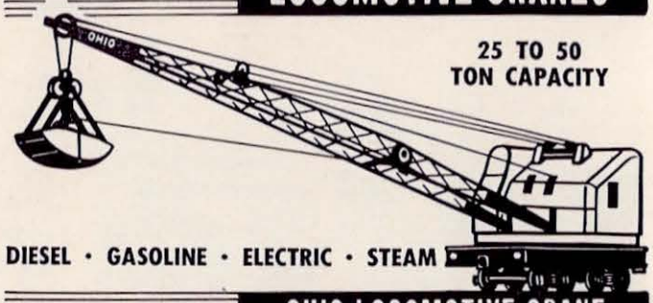

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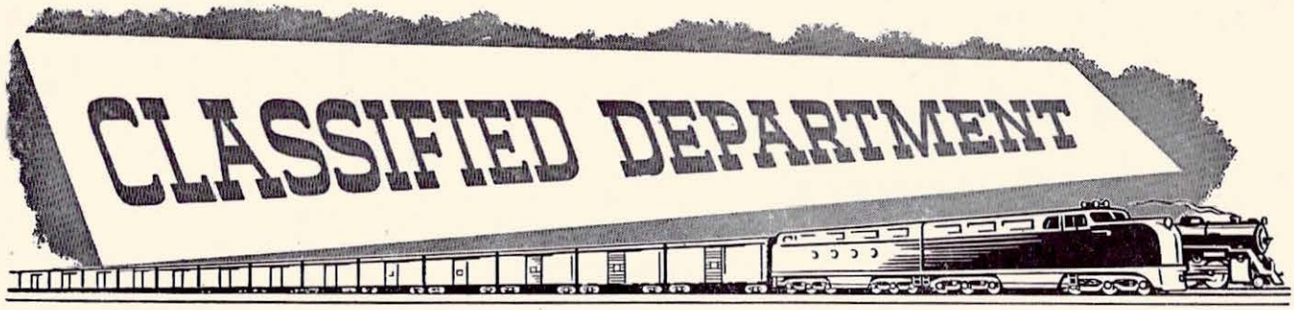

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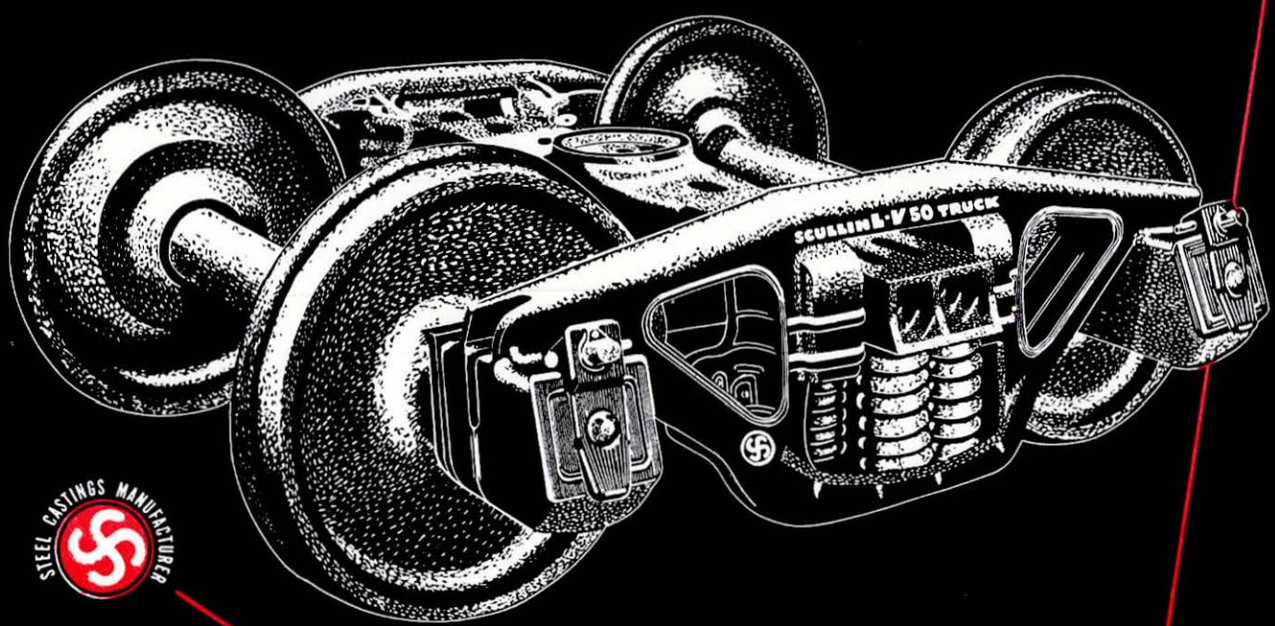

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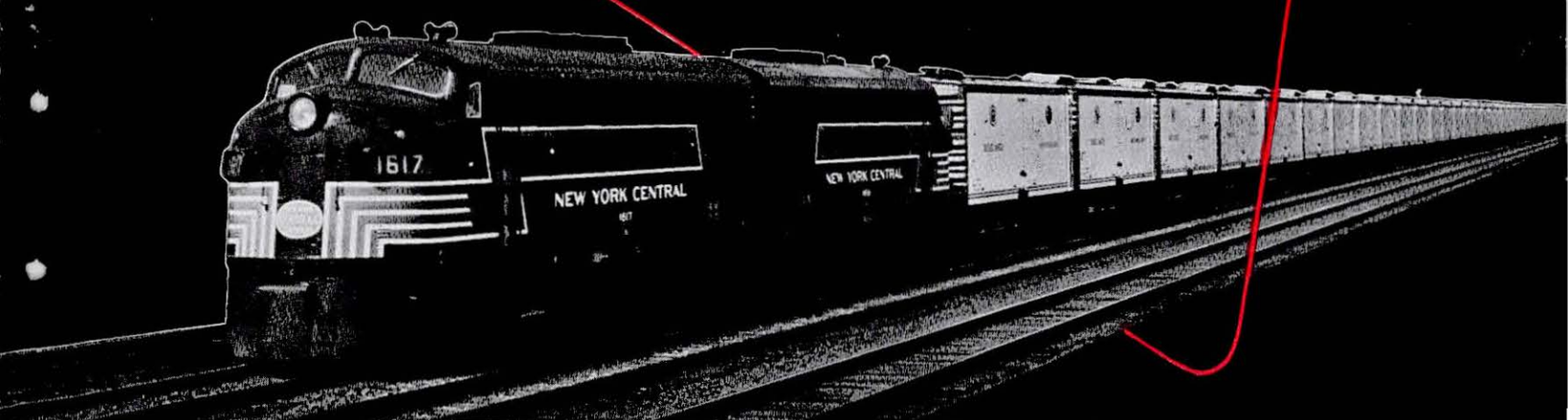

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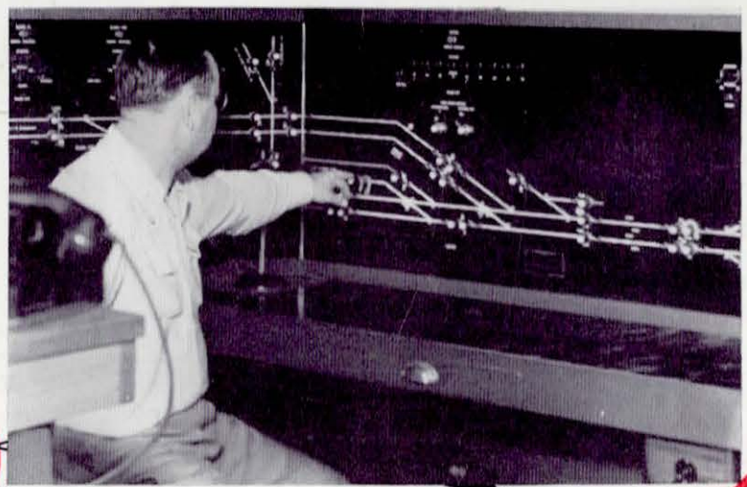

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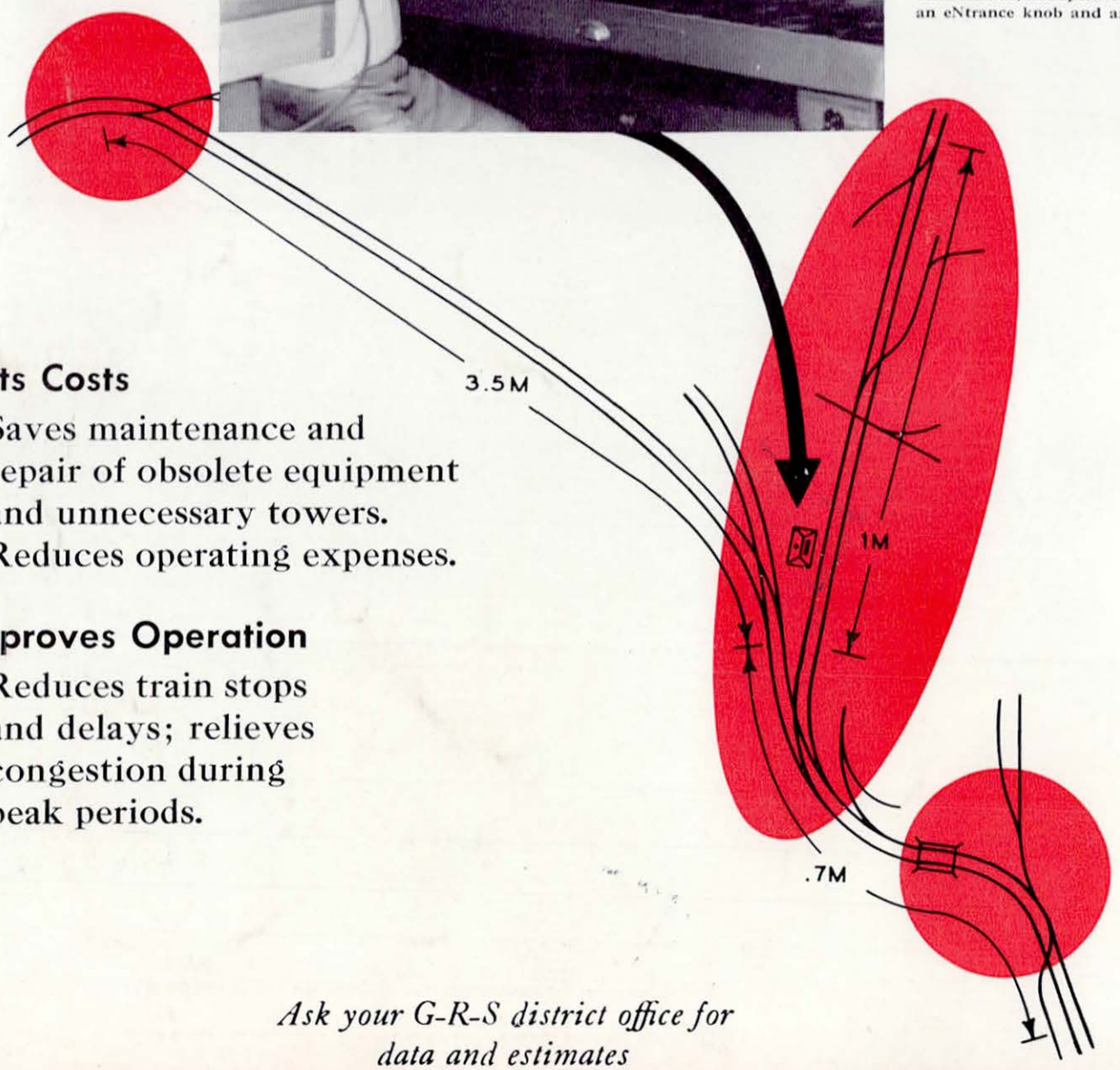

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